



**INVESTIGATING PEER-TO-PEER LENDING AS A
SOLUTION TO UNSECURED LENDING IN AN
UNBALANCED CREDIT MARKET**

by

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PhD BUSINESS MANAGEMENT

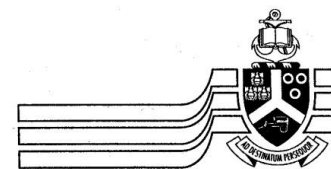
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Abstract

The unsecured lending market in South Africa is characterised by a high consumer debt-to-income ratio, significant legislative amendments, government-instituted credit amnesties, abnormal lender profits, the bailout of African Bank Investments Limited and stagnating growth.

A credit amnesty is a short-term reprieve for consumers with adverse credit information from past debts. There have been two amnesties in South Africa: in 2007 and 2014. Both amnesties were essentially information amnesties, which resulted in the removal of negative information from borrowers' credit profiles. The 2007 credit amnesty aligned the credit market with the National Credit Act (Act No. 34 of 2005) by the removal of specific borrower information that was in misalignment with the National Credit Act (NCA). The 2014 amnesty was a straightforward credit-information-removal exercise. A credit amnesty is a superficial remedy and a short-term fix of a deeper underlying problem of credit usage and profit maximisation. But an amnesty does not result in borrowers changing their behaviour. The credit amnesty in 2007 affected 8 million customer records, but research by the National Credit Regulator (NCR) shows that about 40% of customers who received amnesty (3.2 million people) defaulted on new loans within two years.

Credit amnesties are a symptom of a graver underlying problem within the unsecured credit market in South Africa, which is considered unsustainable based on the notion that government intervention artificially regenerates consumer access to credit without regard to lender risks.

Unsecured lending is growing, and the existing model appears to be increasingly unsustainable. Peer-to-peer (P2P) lending might address some shortcomings and develop as an alternative model. As there has been insufficient research into P2P lending, the focus of this study is on the sustainability of P2P lending as an alternative to traditional unsecured lending in South Africa. The study could reveal P2P lending to be an alternative model of unsecured lending and a more equitable

and sustainable lending model for poverty alleviation, economic growth and wealth inequality in South Africa.

The approach of the study is to understand the unsecured lending market, its practices and norms in South Africa through a sustainability framework view and, by doing so, describe the shortcomings of market practices.

Peer-to-peer lending, both formal and informal, is investigated to understand the nuances and variations in lending. There is a significant informal P2P lending market that has existed for decades, and a formal P2P market that was established less than three years ago. The theoretical investigation into P2P lending highlighted four themes: behavioural underwriting, peer pressure, disintermediation and degrees of separation. These were used as the basis for the qualitative research conducted.

The research conducted probed aspects that revealed the readiness and willingness of South Africans to utilise P2P lending as an alternative to traditional unsecured lending. Information was collected through four means: an online investigation of 1 121 people's preferences into savings and credit; two focus groups of 51 people in total; a sustainability review from unsecured lending practitioners; and a narrative study. The autoethnographic approach described and systematically analysed the personal experiences of the researcher to understand and make sense of real-world experiences. Having travelled to nine and worked in six African countries as a micro financier, the researcher relays personal experiences and attempts to understand the interrelatedness of unsecured lending through personal narratives.

The conclusions of the study point to an intriguing future for P2P lending in South Africa. There seems to be validity in the statement that P2P lending could be a viable alternative to unsecured lending in South Africa. Peer-to-peer lending could be used as a tool to protect vulnerable borrowers from exorbitant credit costs and manage balance sheets more efficiently for individual lenders. A decentralisation of the lending function, with a specific set of investments that address the

outcomes of this research, may begin to distribute wealth more proportionately than the traditional unsecured lending market. Barriers to P2P lending in South Africa could include legislative or regulatory acts, specifically within the NCA, and scaling difficulties of P2P platforms.

Peer-to-peer lending needs further exploration to understand the far-reaching consequences in related fields such as secured lending, asset insurance, health insurance, remittances, small business lending and P2P financial education.

Argument structure

Unsecured lending could be more sustainable when there are:

1. higher repayment levels or, conversely, lower default levels; and
2. a lower cost of credit.

This may mean:

1. a reduction of adverse selection. This involves lenders lending to borrowers who have the ability to repay the loan (essentially an information asymmetry equalisation); and
2. a reduction of moral hazard. This entails borrowers choosing not to repay a debt even though they have the ability to repay (essentially a positive performance producing social contract).

This could be achieved through:

1. behavioural underwriting (relates to adverse selection):
 - a. a system where lenders intimately understand the behaviours of borrowers over time, and so develop an intimate idea of their credit comportment;
 - b. to lower adverse selection; and
 - c. to lower the cost of credit.
2. peer pressure between lenders and borrowers (relates to moral hazard):
 - a. to make sure there is pressure to perform because of a social contract and the stigma attached to non-performance;
 - b. to lower moral hazard; and
 - c. to lower default levels.

The aim of this dissertation is to establish:

1. whether behavioural underwriting results in a:
 - a. lowering of adverse selection; and
 - b. lowering of the cost of credit.
2. whether peer pressure results in a:
 - a. lowering of moral hazard; and
 - b. a lowering of default levels.

Resulting in: higher repayment levels and a lower cost of credit.

Argument:

- Peer-to-peer lending inherently contains both peer pressure and behavioural underwriting.
- Peer-to-peer lending reduces asymmetry of information and increases positive performance of social contracts.
- Peer-to-peer lending could be seen as a sustainable alternative to traditional unsecured lending.

Problem statement

Unsecured lending is growing and the existing model appears increasingly unsustainable. Peer-to-peer lending might address some shortcomings if it is developed as an alternative model. As there has been insufficient research into P2P lending, the focus of this study is on the sustainability of P2P lending as an alternative to traditional unsecured lending in South Africa.

Dedication

I am grateful and humbled by the talents given to me by God. Through our father, everything is possible. I am indebted to Him for all I am.

I would like to thank my wife, Dr Lara Caroline Hatchuel, for her patience, support and guidance during my academic journey. You gave me the strength to continue through the darkest parts. Thank you for believing in me. Without your strength as a wife and mother none of this would have been possible.

To my son, Jake Albert Lavagna-Slater, and daughter, Isabel Mae Lavagna-Slater, thank you for the smiles, giggles and joy you have brought to our family. Thanks for helping Dad to focus on what's important in life.

To my mother, Margaret Teresa Lavagna-Slater, I am forever blessed to have you as my guardian, mother and adviser. I won't ever fully comprehend the strength it takes to raise three children single-handedly. You are strength, integrity and steadfastness personified. You have shaped me into the man, husband and father I am today.

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I have five major academic influences I would like to mention:

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“Strength does not come from winning; your struggles develop your strengths. When you go through hardship and decide not to surrender, that is strength.”

– Mahatma Ghandi

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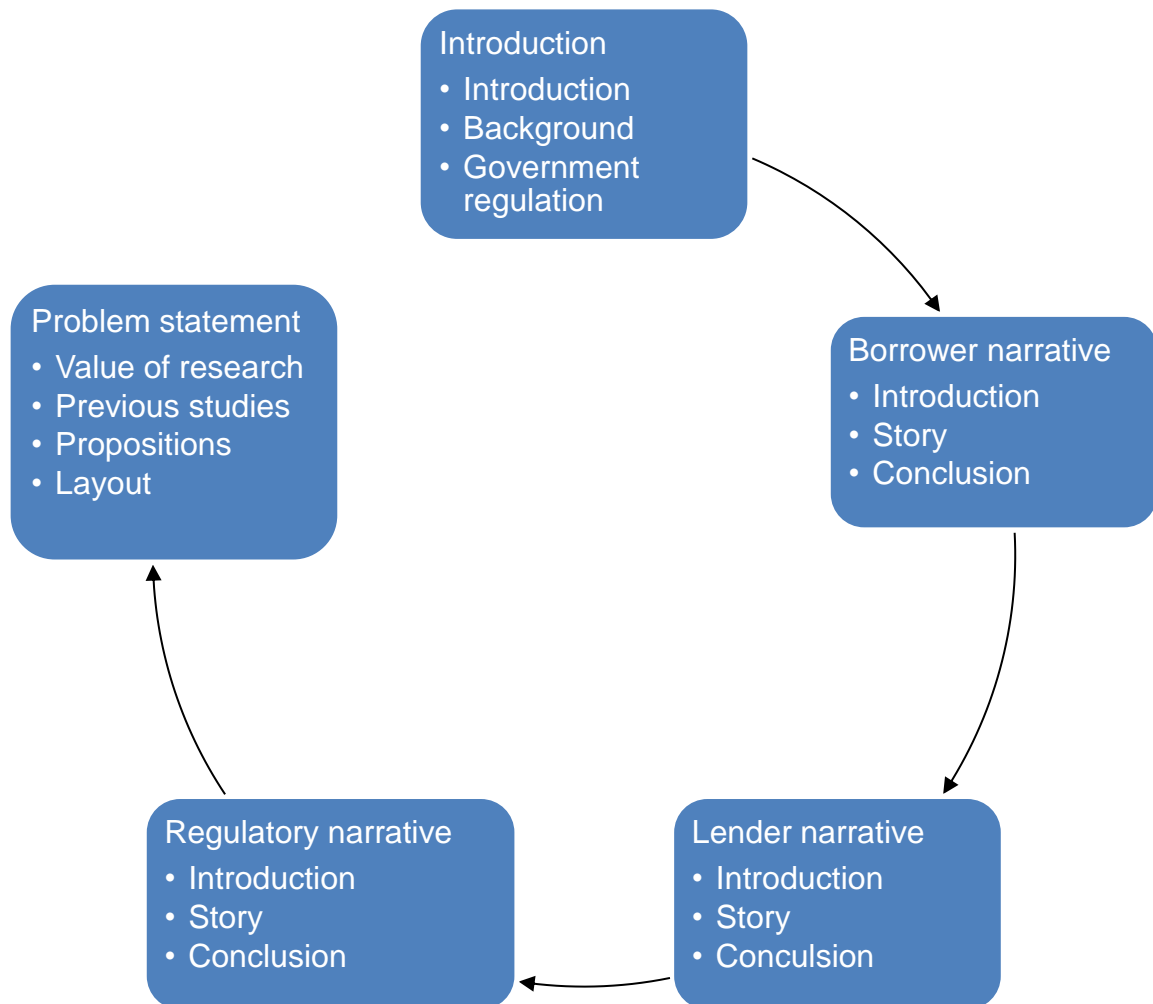
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List of abbreviations

Annual Percentage Rate	APR
Consultative Group to Assist the Poor	CGAP
Consumer Protection Act	CPA
Credit Amendment Bill	CAB
Degree of Separation	DS
Emolument Attachment Order	EAO
Financial Advisory and Intermediary Services	FAIS
Financial Intelligence Centre Act	FICA
Financial Sector Charter	FSC
Gross Domestic Product	GDP
Global Cities Compact Programme	GCCP
Industrial Development Corporation	IDC
Living Standard Measures	LSM
Micro-Finance Institutions	MFIs
National Credit Act	NCA
National Credit Regulator	NCR
National Student Financial Aid Scheme	NSFAS
Non-Authenticated Early Debit Order System	NAEDO
Peer-to-Peer	P2P
PricewaterhouseCoopers	PwC
Public-Private Partnership	PPP
Regulation of Interception of Communications and Provision of Communication-Related Information Act	RICA
Small Enterprise Finance Agency	SEFA
Small Enterprise Development Agency	SEDA
Statistics South Africa	Stats SA
Treating Customers Fairly	TCF

Chapter 1: Introduction



1.1. Introduction

There are symptoms of borrower exploitation by lenders in the South African unsecured lending market. Karl Marx defines exploitation as the forced appropriation of the unpaid labour of workers (Elster 1978). Placing such a definition in the context of lending would imply that lenders unfairly extract a portion of borrowers' wealth (Theobald, 2014). This assessment manifests itself in an excessive repayment burden, increasingly high levels of borrower over-indebtedness, and lender portfolio losses. Affirmative gestures are the 2007 and, more recently, the 2014 credit amnesties, which illustrate the South African government's intervention in an attempt to solve these problems. However, as research done by the NCR reveals that about 40% (3.2 million) of clients who received an amnesty in the 2007 credit amnesty, had defaulted on new loans within two years.

An amnesty does not change borrowers' behaviour, thus it can be expected to be an unsustainable, short-term reprieve for the demand side of the credit market.

Research conducted by the Credit Providers Association (now known as the South African Credit & Risk Reporting Association) on 600 000 people given credit amnesty in 2007 found that 64% of those who benefited from the amnesty then entered into new credit agreements, and 74% of those ended up with bad or adverse accounts (Benjamin 2013).

1.2. Background and context to unsecured lending

The South African financial services industry is dominated by large multinational corporates and traditional banking institutions. According to PricewaterhouseCoopers (PwC) (2012) and Deloitte Touche Tohmatsu Limited (2012), traditional banks hold an approximate 86% of all banking assets in the South African market, niche banks make up 10%, and microfinance houses secure the remainder of the market. More than 4 000 credit providers are registered with

the NCR in South Africa, but the six major banks control the majority of the market. The major banks are: ABSA, First National Bank (FNB), Standard Bank, Nedbank, Capitec and African Bank.

It's interesting to note that in lower-income countries such as South Africa, traditional banks still dominate lending in all its forms; perhaps this is because of the asymmetry of information. The World Bank defines asymmetry of information as a situation where two economic agents in a market transaction have different amounts of relevant information. Asymmetry may allow the agent with more information to practise opportunistic behaviour. The economics of information show how information asymmetries undermine credit markets in places where potential customers have few assets to offer as collateral (Besley 1995).

Traditional banking institutions offer an array of financial services, from transactional accounts to loan products for both individuals and businesses. These services cover most financial needs of consumers and businesses, and have been coupled with products such as asset insurance and health insurance. The 2013 All Media and Products Survey (AMPS) data on the South African banking sector show that ABSA, Standard Bank, FNB, Nedbank and Capitec dominate most segments of the banking market and have faced little competition across all banking products from smaller niche participants.

Access to credit is central to economic life (Mashigo & Schoeman 2010). In South Africa, over the past 10 to 15 years, there has been an emergence of niche financial providers that offer limited and targeted financial offerings to customers (Finmark Trust 2015). Participants such as Capitec, African Bank, FinBond and Atlas Finance have entered the market and concentrated most of their efforts on offering short-term, unsecured personal loans to individuals. There has also been the emergence of non-financial service providers, such as retailers including PEP, Woolworths and Spar, which have begun to offer financial services (Watson 2015). Bank executives acknowledged the threat posed by non-traditional competitors, such as retailers and mobile service providers (PwC 2013). The increased financial services competition allowed smaller niche lenders and retailers the

opportunity to serve the under-served market in South Africa. Traditionally called the microfinance market, microfinance institutions provide financial services to the poor (Odi *et al.* 2013). Their strategies initially focused on offering products like unsecured loans and insurance products to lower-income groups – typically individuals earning between R3 000 and R12 000 a month – while the larger banking institutions consolidated their market shares in the middle- and upper-income segments. They tended to steer clear of this section of the market in the early 2000s, because they considered it too risky for lending after the termination of access to the Persal (government payroll) system (Theobald 2013). The first significant move by traditional banks into the lower-income segments of the population was the introduction of the Mzansi account. The Mzansi account was designed by the incumbent banks as part of a government initiative to promote inclusive financial products and services for the unbanked sector of the economy (Finmark Trust 2013).

According to the Banking Association of South Africa, the Mzansi initiative was launched by banks in 2004 to provide affordable banking services to the unbanked yet bankable population as part of Financial Sector Charter (FSC) commitments. Prior to the introduction of the Mzansi account, it was estimated that about 17.8 million individuals had no access to basic financial services, and most of these individuals fell within the living standard measures (LSM) 1–5 market, the lower income market segments.

Niche credit providers identified a significant gap in the South African lending market at the bottom of the economic pyramid. The country was in the beginning stages of making changes to its banking system that could significantly impact on the people living at the base of the pyramid and their local economies (BoP Learning Lab 2011). Until recently (within the past 10 to 15 years), larger banks did not realise the opportunity at the bottom of the pyramid. These individuals had consistent or permanent employment, but did not necessarily possess all the five Cs of credit: character, capacity, capital, collateral and conditions (Haeberle 2009). This target market may be seen as the working poor. The working poor are

defined as individuals who were “mainly” at work (at least six months) during the previous year and are living in a poor household with an income below the “at-risk-of” poverty threshold (Guillén & Dahl 2009). Lower-income earners, or the working poor, specifically did not meet the collateral and capital requirements for traditional loans. The credit needs of this economically active group were therefore not being met through large banking institutions, which opened a lucrative opportunity for niche credit providers. Niche credit providers began to offer targeted and tailored unsecured credit products to lower-income groups. At this stage, it is necessary to define unsecured and secured lending. Secured lending is any kind of lending secured by collateral. Collateral is an asset pledged by a borrower to a lender until a loan is paid back. If the borrower defaults, the lender has the right to seize the collateral and sell it to pay off the loan (Balkenhol & Schutte 2001). This means that if a loan is not repaid, the asset being financed is taken back or repossessed. Mortgage and vehicle asset finance are typical examples of asset-backed loans.

An unsecured credit transaction is credit in respect of which the debt is not supported by any pledge or other right in property or suretyship, or any other form of personal security (National Credit Act 2005). This means that if a borrower defaults on a loan, the financial institution cannot automatically repossess assets of the individual without lengthy and costly legal proceedings. The recourse for an unsecured credit provider is limited to debt collection and legal procedures, and excludes immediate asset repossession. These definitions are critical to the discussion of risks. Typically, unsecured lending carries a much higher risk for lending institutions than secured lending, because there is no defined asset to repossess and sell to recoup some of the capital and interest lost by the defaulting party.

The approach to the provision of unsecured lending by niche providers was somewhat different to that of established traditional banks. Focused on higher risk individual clients, niche unsecured lenders increased the speed of application to disbursement (NCR 2012), improved access to credit – both physically and in value – and focused on doing high volumes of business. This new approach

yielded significant growth in this market, as Figure 1.1 shows. The success of niche credit providers has been followed by large banks, which have recognised the business opportunities in this regard and now actively compete for market share (NCR 2012)

Figure 1.1 provides some insight into South African household asset-backed (secured) debt versus non-asset-backed (unsecured) debt. Asset-backed and non-asset-backed credit have largely tracked each other since 2001. It was only until 2010 when a notable divergence occurred, representing a fundamental shift in the credit industry. The reliance in unsecured credit has grown.

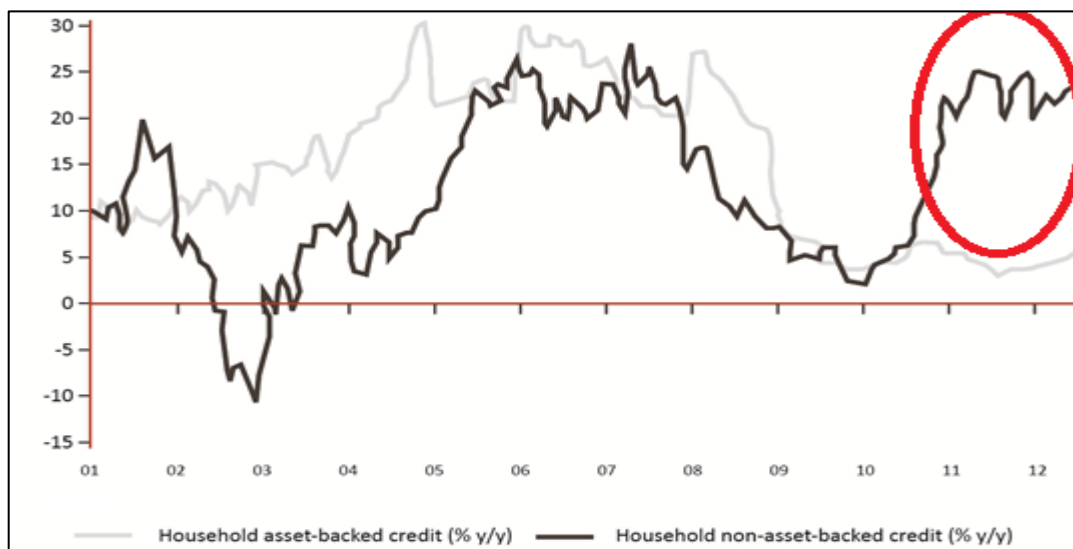


Figure 1.1 Household asset-backed versus non-asset-backed loan growth

Source: NCR 2012

To put Figure 1.1 into perspective, it must be analysed together with Figure 1.2. Although mortgage loans outweigh any other type of credit in terms of total value, recently there has been an increase in the value of unsecured credit agreements. At this stage, unsecured lending poses little systematic risk due to the capitalisation of the banks (Duncan 2013).

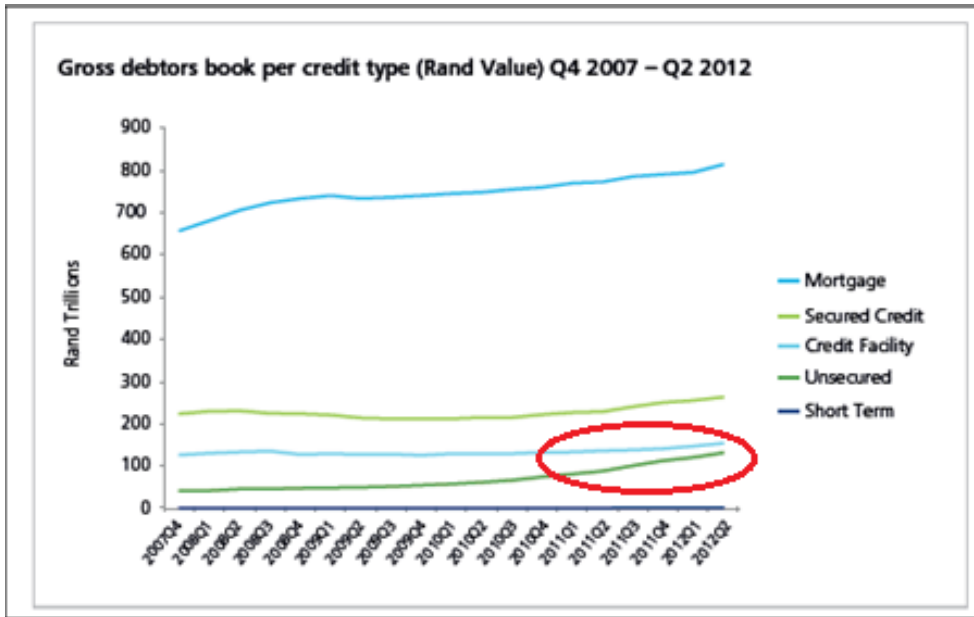


Figure 1.2 Gross debtors' book per credit type

Source: NCR 2012

The reasons cited for the shift towards unsecured credit agreements include increased competition, access to finance and efficient credit extension (NCR 2012). Customers are demanding faster, easier processes in credit agreements.

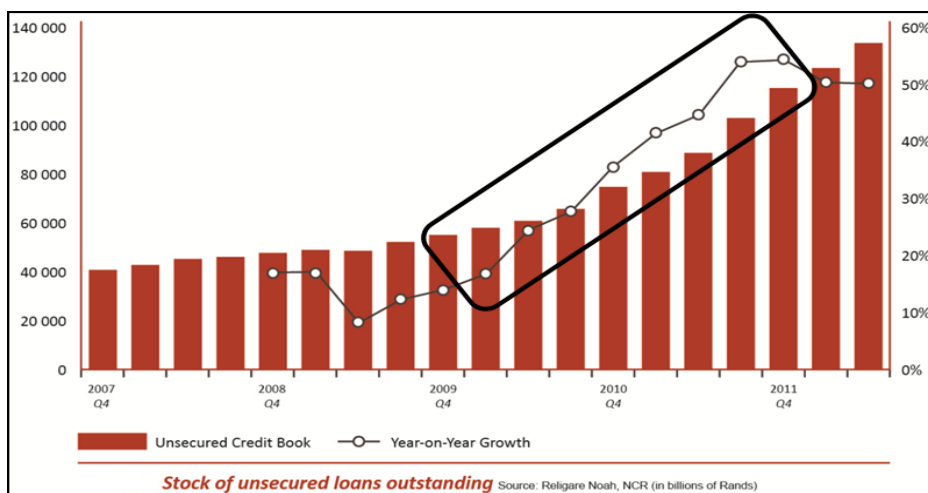


Figure 1.3 Stock of unsecured loans outstanding

Source: NCR 2012

Figure 1.3 illustrates the year-on-year growth in the unsecured credit book from the fourth quarter of 2007 to the middle of 2012. In South Africa, access to consumer credit has precipitated unprecedented growth, rising from 11% in 2009 to 50% in 2012, despite the introduction of the NCA and the global recession, and the 2011/12 period surpassed all previous consumer credit levels (Consumer Credit Market Report 2011). The NCA, which was instituted as conduct legislation with an aim to curb reckless lending by credit providers and over-indebtedness of consumers, came into force in June 2007, before the global financial crisis. This rapid growth is driven by the expanding access to and availability of credit, the increased risk appetite of lenders, increased cost of living and an increase in the number of middle-class consumers in South Africa (NCR, 2012).

The year-on-year growth in outstanding unsecured loans has stabilised from its high in 2011. The total value of unsecured loans granted in 2008 was R30.8 billion; in 2012, it was R83.3 billion, which translates into an average growth of 40% a year since 2008.

This 40% growth came from a surprising source. Initially, growth in unsecured lending came from lower-income groups, but from 2008 to 2012, the largest growth segment within unsecured lending was the middle class, LSM 6–7 (Finscope 2011).

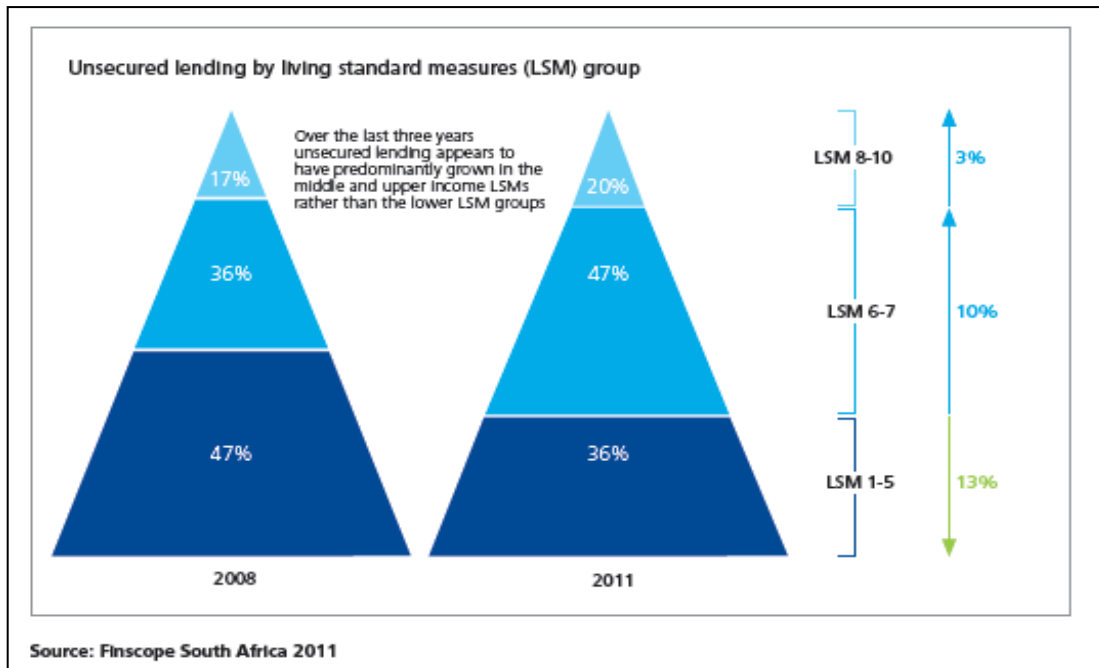


Figure 1.4 Change in unsecured lending by LSM group

Source: Finscope 2011

Perhaps an explanation of this phenomenon is: generally, individuals who desire to hold a similar standard of living with peer groups and expect higher income prospects will borrow in order to fit into place with behaviour expected by their peer groups (Rutherford & DeVaney 2009). This growth in unsecured loans has a remarkable impact on the comparative market shares between the niche credit providers and larger banking institutions – a notable shift in the unsecured lending market from the initial target market of under-banked to middle class.

Figure 1.5 illustrates the market share of the major players in the unsecured lending market. Most notable are Capitec and African Bank, which have steadily increased their market share in unsecured lending. Absa, along with Investec, has seen a marked decrease in its share of the unsecured market. The remaining banks – Standard Bank, Nedbank and FirstRand Bank – have managed to maintain their market share. There is an observed market share cluster around the 30% mark.

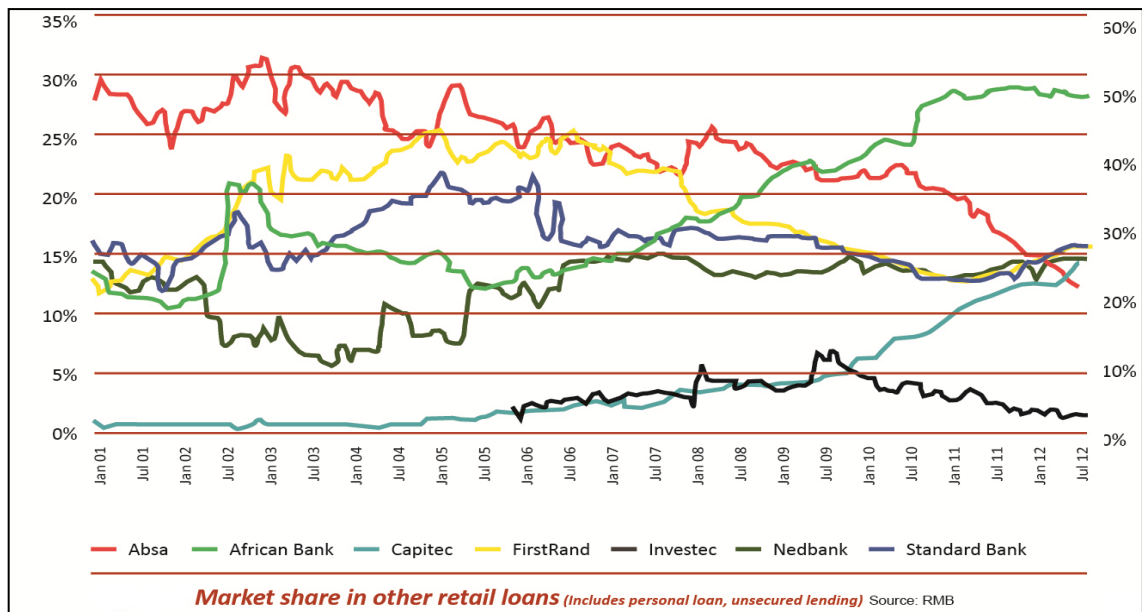


Figure 1.5 Market share of retail loans

Source: RMB 2012

The credit crisis of 2007/2008, although widely expected, precipitated a severe, protracted reduction in credit availability that continues to affect the global economy participants (de Jongh *et al.* 2013). Although there are numerous explanations of the origins of the credit crisis, it is now generally accepted that a principal cause was negligent lending practices by banks (Jobst 2010). The 2008/2009 recession had a significant impact on the liquidity of traditional banks, which substantially reduced the granting of credit by large banking institutions in South Africa. Many economists attribute the severity of the recession to the broad and deep contraction in lending (Ile & Lewis 2013). Traditional banking institutions retreated sharply from the credit market by tightening lending criteria, which resulted in a marked contraction in the supply of credit. It is important to understand that the recession affected the supply of credit, not the demand; client demand for credit remained. This can be seen in Figure 1.6, which shows that the slowdown in credit usage after the 2008/2009 crisis has not seen a significant nor rapid decline. The South African consumer remains under financial pressure (PwC 2013).

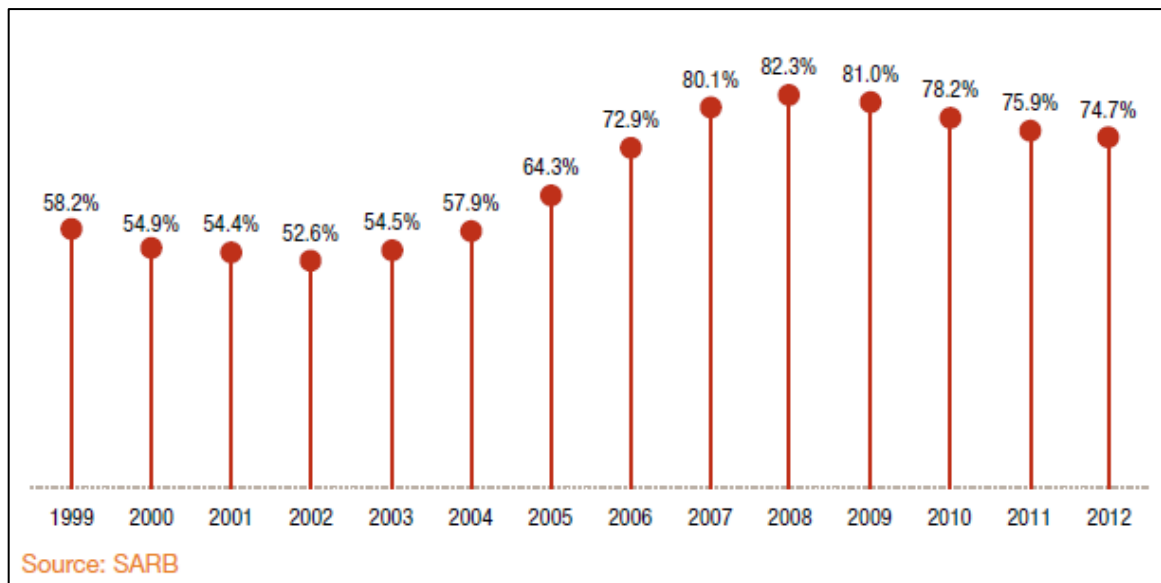


Figure 1.6 Household-debt-to-disposable-income ratio in South Africa

Source: SARB 2012

As seen in Figure 1.6, South Africa has a household-debt-to-disposable-income ratio of 74.7% (SARB 2012). China and India’s household-debt-to-disposable-income ratios are approximately 40% and 20% respectively (Deloitte 2015).

It’s clear that unsecured lending has grown substantially over the recent history and clients, especially the middle- and lower-income groups, now experience a high debt-to-disposable-income ratio.

1.3. Government intervention

Government interventions include: providing exemptions from the Usury Act in 1992; the revocation of access to the Persal system in 2000; the introduction of the NCA in 2005 and the first credit amnesty in 2007; the establishment of the NCR in 2007; the introduction of the National Credit Amendment Act in 2014; and the second credit amnesty in 2014.

The intentions of the NCA are to: promote a fair and non-discriminatory marketplace for access to consumer credit, and for that purpose to provide for the general regulation of consumer credit and improved standards of consumer

information; promote black economic empowerment and ownership within the consumer credit industry; prohibit certain unfair credit and credit-marketing practices; promote responsible credit granting and use, and for that purpose prohibit reckless credit granting; provide for debt reorganisation in cases of over-indebtedness; regulate credit information; provide for the registration of credit bureaus, credit providers and debt-counselling services; establish national norms and standards relating to consumer credit; promote a consistent enforcement framework relating to consumer credit; and establish the NCR (NCA 2005).

The NCA regulated the unsecured lending market with the intention of stimulating the provision of fair credit at the bottom of the economic pyramid. The extension of credit facilities to the poor can help to hedge against the individual or idiosyncratic risk that is especially problematic for the poor, and in so doing, “smooths” income to make the poor less dependent on government handouts and grants (Mashigo & Schoeman 2010). Lower-income groups had not previously had access to fairly priced credit from formal credit providers. The lack of previous credit histories increased the associated risks and the cost of credit (NCR 2012). The government effectively opened this market to business and enabled competition.

At this point, it is necessary to distinguish between the uses of credit. There are two general classifications for the use of credit: developmental credit and consumption credit.

Developmental credit is credit used to invest in projects or activities that will create wealth for individuals in the future, such as education, housing or business investments (Sharrock 2011). Projects may include purchasing or renovating a house, or purchasing a car to use in the production of income. Activities include using credit to pay for university tuition, where, after gaining a qualification, an individual would have the ability to earn a better living through their newly acquired skills and knowledge. The NCR defines this type of credit as a loan used for the purposes of wealth creation. Microfinance is built on the premises that access to financial services enable poor households to transform from surviving every day to

planning for the future, investing in better nutrition, investing in their children's welfare and empowering women economically and socially (Ehigiamusoe 2005)

Consumption credit would be one in which the returns would be measured in terms of personal enjoyment and standard of living rather than its direct effect on income (Mohideen 1991). Consumption-related credit extension would include household consumption expenditure and costs relating to social family commitments (NCR, 2012). These purchases do not create opportunities to build wealth in the future, but allow individuals and families to manage daily expenses.

The distinction is important as it relates directly to sustainability. The continued use of developmental credit is largely sustainable, but the continued use of consumption credit is not. This argument holds for the simple reason that when credit is used for developmental purposes, an individual or family's wealth over time increases and they are better off. The cost, efficiency of delivery, financing period, and terms under which finance is obtained influence the likelihood that development will be sustainable (Okeahalam 2013). Consumption credit does the opposite: individuals and families become poorer after the use of this type of credit because their earning potential remains constant, whereas their debt levels continue to rise. The continued use of consumption credit may eventually result in a debt spiral.

In South Africa, credit providers indicated that they believed usage of credit was largely for consumption purposes, with only some used for wealth creation (NCR 2012). The available data suggests a range of consumption smoothing including food, clothing and transport (Karlan & Zinman 2006).

An unintended consequence of governments' regulatory enablement of the unsecured market is the overuse and misuse of unsecured credit by individuals.

1.4. Researcher's experience of unsecured lending

I have been involved in financial services for more than 10 years, focussing mainly on low-income banking, microfinance practice and research. I have worked for

Standard Bank in South Africa, Namibia and Botswana, an online credit provider in South Africa, and a microfinance house in Zambia, Kenya, Ghana and South Africa, all within the unsecured lending environment.

I have been involved in activities related to product and channel development. In the product sphere, I have developed and managed lending, savings and insurance products. With respect to channel development, I have worked in the establishment of branch, agent, call centre, mobile and online channels. I have had the opportunity to visit numerous townships in every province of South Africa and many other in the African countries in which I have worked. There are notable differences in unsecured lending approaches across Africa, but there are certain themes that endure.

I started my journey of discovery into unsecured lending through my master's dissertation, entitled 'The Synchronisation of the Needs of Lenders and Borrowers in Unsecured Lending in South Africa'. I continued to research and write about unsecured lending in South Africa, attempting to make sense of the industry mechanisms.

I've compiled personal narratives that offer a good starting point in understanding the issues affecting each participant in an unsecured lending transaction. The purpose of these personal narratives is to allow the reader insight into the events and experiences of the researcher.

1.5. Borrower narrative

The borrower narrative is the story of an individual borrower.

1.5.1. Borrower introduction

I met John Matsuma (identity protected) on a cold morning in Katlehong, on the East Rand of Johannesburg, in the winter of 2013. I was working for the inclusive banking (low-income banking) of Standard Bank. One of my responsibilities was to ascertain the effectiveness of the low-income banking kiosks we had set up in

Katlehong. John was on his way to work. He was standing in line to catch a taxi, and I approached him to ask him a few questions about the kiosk we had set up.

1.5.2. Borrower story

John and I began talking, and I pointed to the kiosk to ask him if he had seen it and what his thoughts were on using it to conduct his banking activities. His first response was that he didn't earn enough money to have a bank account with Standard Bank because it was only for rich people. I replied that the bank had launched a very cheap account to suit his needs. The conversation took a swift turn to loans. He interrupted me by asking if we offered loans to people like him, and I replied in the affirmative, provided he could afford it.

I asked John to tell me a little about himself so I could get to know him better. John explained that he had three children, and his wife worked as a primary school teacher in the neighbouring township of Vosloorus. John was a packer at large department store in Boksburg.

John explained that their combined income barely covered the necessities of daily life, such as food, clothes, transport, school fees, airtime, electricity and water. John lived in a modest two-bedroom house in Katlehong not far from where he was waiting in line for his taxi.

I asked John if he had any loans, and he hesitantly said he did. "At another bank, not yours," he explained. He said this institution came to his work and set up a kiosk to sell loans to him and his colleagues. He said he didn't really need the loan at the time, but he took it because he thought it was a good deal. When asked what he did with the loan money, he said he used it for a lot of things: clothes, paid school fees and bought things for the house such as furniture, TVs and appliances.

John explained that he felt regret for taking the loan, because he was repaying so much over a long period. John did not fully understand the total cost of the loan. He looked at the size of the loan, R15 000, in relation to the monthly instalment of

R800 over 24 months. John felt disgruntled because the bank was taking “too much”, and he was left with relatively little take-home money.

John’s taxi arrived, and we parted ways after sharing contact information. A few days later, I called John to continue our conversation. John went on to say that the instalment of R800 did not allow him to make ends meet each month. He says his wife had to take out a loan to meet the unforeseen expenses of looking after their parents. He was worried that the cost of two loans would be too much for them to afford.

John said they don’t save at all and spend what they earn each month. He was worried about the future, and said that if he or his wife lost their jobs, they would not be able to feed and house their family. John asked me questions I was not able to answer immediately, such as why do loans cost so much, and why have food prices, especially maize meal, and electricity increased so much.

1.5.3. Borrower conclusion

Both John and his wife were paying off debts used for largely consumption purposes, subsequently experiencing typical consumption loan-buyer’s remorse. Credit can increase impulse spending and buyer’s remorse (La Bella 2013). Credit is freely available however, borrowers are not fully aware of or comprehend the long-term or total cost of credit. The cost of credit, in this case, ate into John’s disposable income to such an extent that he was worried about his ability to afford daily living expenses.

When borrowers are faced with tough decisions, such as paying for necessities or repaying the debts created by consumption loans, there is a sustainability caveat. Unsecured lending is sustainable only when there is high repayment and low cost. When there is a high cost burden, borrowers are forced to choose which expenses to pay – necessities or debt – resulting in a moral hazard dilemma. Moral hazard is any situation in which one person makes a decision about how much risk to take while someone else bears the cost if things go badly (Krugman 2009).

1.6. Lender narrative

The lender narrative is the story of a registered credit provider.

1.6.1. Lender introduction

I have worked for three different lending businesses over the past 10 years, each focused on different types of lending:

1. A bank in South Africa focused on low-income banking (researcher's experience in South Africa, Namibia and Botswana).
2. An online lender in South Africa focused on lending to online shoppers.
3. A microfinance house lending in Ghana, Kenya, Zambia and South Africa.

1.6.2. Lender story

Lenders across the three lending institutions share two common themes:

1. The first is the constant management of risk, particularly credit and default risk. Every business has risks – including funding, operational and fraud risks – but lenders spend most of their time managing the risks of lending and trying to find the best options by using scorecards, models and behaviours to reduce the risk of a client defaulting. This is to reduce the chances of adverse selection.
2. The second is the constant pursuit of loan volumes. There is pressure to write more loans each month to gain loan book momentum and reach higher levels of profitability.

These are directly contradictory themes: risk versus sales focus. Sales and credit departments usually have conflicting mandates – one is to lower risk and the other is to sell as many loans as possible.

Sales employees are incentivised, usually with an element of commission, to sell more loans. This incentivises staff to sell loans at any cost, take on additional risk,

or sell to marginal clients. Generally, the sales department takes preference over risk mitigation, as more sales are required to reach profitability.

I have experienced this when assessing clients applying for a loan, discovering that they already have several loans that they can't really afford, but are still applying for a further facility. Therefore, the pursuit of sales disadvantages the lender from a risk perspective and the client from a repayment perspective.

The pursuit of sales stems from funders or shareholders requiring a minimum return on their capital, which, in turn, requires the lender to earn a margin on this return to show profitability. A volume focus blurs the lines between risk mitigation and selling to the right clients. This was evident in the three lenders for which I've worked.

Low-income lending requires a large number of loans to compensate a higher rate of default in this segment of the market. As a result, there is a risk-adjusted interest rate applicable to these loans. Effectively, borrowers who repay their loans compensate the lender for default losses.

The online lending experience required an assessment of shopping activities of clients who actively shop online. This involves giving clients credit to shop online for consumable items such as clothes, watches, bikes and accessories. The lender is incentivised to give credit to stimulate purchases on goods on certain sites, which provides an opportunity for online shoppers to buy more than they can afford. This is consumption purchases, which require immediate online credit approval.

Microfinancing, or micro-lending, operations in Africa proved to be different from my previous two work experiences in three marked ways. Firstly, there are limited finance options for individuals in African markets. The credit market is far less competitive than the market in South Africa, which creates a vacuum and results in rates being far higher than in South Africa. The higher returns compensate for the additional risks of lending in Africa.

Secondly, financial services industries in Africa are far less developed, with structural deficiencies such as a lack of bank accounts, inefficient clearing and interbank transfers, and ineffective collection processes. This increases the risk of lending to individuals. Microfinance houses circumvent most of these risks by lending only to government or private employees and deducting debt amounts directly off their salaries through deduction codes. This drastically cuts the risk of lending, but retains the inflated risk-based interest rates for the lender.

Thirdly, the use of loans is predominately for developmental purposes. The vast majority of loans outside of South Africa are used for developmental purposes such as education, business ventures and housing – positive wealth-creating credit.

1.6.3. Lender conclusion

Lenders constantly face a trade-off between risk and sales, a trade-off that forces lenders to manage adverse selection closely. Adverse selection describes a situation where an individual's propensity to buy and the quantity purchased positively correlate with their risk of loss, and the seller is unable to price for this correlation (Chandler 2007).

1.7. Regulator narrative

The regulator narrative is the story of an individual representing the national credit regulator with a focus on unsecured lending.

1.7.1. Regulator introduction

I arranged to meet Mpho Tshabalala (identity protected) as part of my research to get an understanding of the complex environment the National Credit Regulator faces. I met Mpho at the NCR head office. He seemed passionate about the credit industry in South Africa, but slightly disillusioned. I began the conversation by explaining my objective to investigate a sustainable alternative to unsecured

lending. Mpho was intrigued by my studies, but when I asked him to give me an overview of the state of unsecured lending in South Africa, he immediately showed his disillusionment.

1.7.2. Regulator story

Mpho described clients generally as over-indebted and overcommitted because of hyper-consumption and reckless spending. He described lenders as greedy, forcing credit on to consumers who did not need it. He was scathing of both sides – lenders and consumers – in his description. He said despairingly that the deluge of legislation had regulated the supply side of the market, but it had had little effect on the demand side.

I got the sense that the NCR faces a unique dilemma. On the one hand, the regulatory body has a mandate to both protect vulnerable consumers and promote a functioning market, but on the other, it faces pressure from various political stakeholders and agendas.

I probed both themes over coffee with Mpho. He mentioned that consumers in South Africa are different from consumers in the rest of Africa – specifically when it comes to credit for consumption versus developmental. South Africans are mainly driven by consumption, whereas consumers in the rest of Africa are mainly developmentally driven. This was something I had witnessed first-hand in my professional experience in various African countries. Mpho added that consumption debt is difficult to stem, and client behaviour towards consumption even more difficult to change. The demand for unsecured lending in South African is strong, and consumers tend to borrow at any cost. The NCR's objective is to protect consumers, even against themselves, and at the same time allow for a functioning credit market. Mpho mentioned that lenders have robust market demand, but the quality of that demand is not sound. Lenders need volume *and* good-quality borrowers; they can achieve volume easily, but the risks are large. This forces lenders to increase the cost of credit to the maximum allowable limit or abstain from lending.

Mpho went on to say that he didn't know which was worse: lending at the maximum limit to hedge their portfolios or not lending at all. The NCR needs to have a functioning credit market to ensure there is healthy competition among lenders.

Mpho also alluded to the undercurrent of political agendas – the utilisation of the NCR as a tool to achieve political goals. Being a state regulatory body, the NCR is pressured to achieve national objectives of growth targets and job creation. A burgeoning unsecured credit market fuels consumption, which in turn promotes economic activity, growth and job creation.

1.7.3. Regulator conclusion

The NCR is stuck between seemingly conflicting and opposing objectives. The regulator is making progress with legislation such as the National Credit Amendment Act, enacted in 2014, but Mpho is wary of the short-term impact of credit amnesties and reminded me that the borrowers who were bailed out by the 2007 amnesty were largely back in default territory – and the same is likely to happen as a result of the 2014 amnesty.

1.8. Background to the problem statement

Unsecured credit transactions are usually a more expensive option for customers when compared with secured credit. The NCR confirms that unsecured personal loans are a relatively costly form of credit for consumers (NCR 2012).

The total cost of credit, which includes interest charges, initiation and monthly fees, and credit life premiums, places a higher cost burden on users of unsecured debt. This high-cost burden places consumers under financial pressure, which may result in adverse repayment histories or even defaults. Any negative results are captured on the individual's credit history, inhibiting their future credit prospects.

The South African unsecured lending market in its current form appears unsustainable from a customer perspective. Direct interventions (credit amnesties) by government agencies, such as the Department of Trade and Industry, are used to address this unsustainability in the short term.

A credit amnesty is the removal of adverse credit information from customers' credit reports (TransUnion 2014). The information affected is specifically defined, and only debts under a specific threshold are affected. This is effectively a removal of barriers to credit for those adversely affected by impaired credit records.

The first credit amnesty was granted in 2007 when the NCA came into force. The act required that essential credit information be kept on the credit bureau for a set time period, effectively removing information that fell outside the prescribed period. Section 73 of the act provides for a one-off removal of certain credit information from consumers' credit reports. This information pertained to amounts less than R5 000, and affected mainly the unsecured credit market. The 2007 amnesty saw a rise of 3.2% in new credit loans from credit providers to the 8 million people whose accounts had been affected.

Six years later, the second credit amnesty was granted through the implementation of the 2014 credit information amnesty (TransUnion 2014), a government initiative that took effect on 1 April 2014. The credit bureaus were obliged to perform a one-off removal of negative information, including defaults and judgements reflected before 1 April 2014.

This credit amnesty resulted in the deletion of information from credit records of 4 million credit inquiries, 7.7 million adverse classifications of consumer behaviour, and 1.7 million adverse classifications of enforcement actions (TransUnion 2014). Experian, a registered credit bureau in South Africa, revealed that more than 2 million South Africans were affected by the 2014 credit information amnesty, which deleted judgements granted against consumers between 2007 and 2011 equal to or below R10 000 from the records, irrespective of non-payment, but not written off. The amnesty also removed judgements of more than R10 000 granted

between 2006 and 2011 from all credit records on submission of evidence of settlement (TransUnion 2014). The removal of information pertaining to these debt amounts had a direct impact on the unsecured lending market. The 2014 credit amnesty removed the negative data of more than 2 million people, effectively increasing the size of the credit market (Experian 2014).

The 2014 credit amnesty further supports a view that the unsecured credit market in South Africa is unsustainable from the perspective of the customers, or users, of credit.

Credit providers use credit information about customers, specifically their ability to repay their historical debts, as an indicator of whether they are able to repay future debts. Credit information acts as predictive information about the customer. Credit providers don't usually provide further credit to customers who have historical negative credit information. Customers' access to further credit is severely restricted by negative credit information (Gamede 2014).

The size of the credit market is decreased by the amount of negatively impaired credit customers. The NCR estimates that approximately half of South Africa's 20 million credit-active consumers are in some way credit impaired (NCR 2014).

From the perspective of the credit provider, the 2014 amnesty allowed 2 million more customers to access credit – customers who would not have received credit if not for the amnesty. This increases the chance of adverse selection of lenders and the cost of credit trends. The majority of these consumers are unsecured borrowers as a result of the size of the debts that were provided amnesty.

Credit amnesties are a symptom of an unsustainable market. To this end, equilibrium and sustainability are unlikely to be achieved without external intervention. In light of this, it is apparent that there is a need to work towards a sustainable solution in the unsecured lending market that:

1. reduces the cost burden placed on customers; and
2. reduces the risks associated with credit provision.

1.9. Problem statement

Unsecured lending is growing and the existing model appears to be more unsustainable. Peer-to-peer lending as an alternative model might address some shortcomings. As there has been insufficient research into P2P lending, the focus of this study is on its sustainability as an alternative to traditional unsecured lending in South Africa.

1.10. Value of research

The value of this research is both scientific and economic.

1.10.1. Scientific value

This research contributes scientifically by providing an innovative conceptual approach to the unsecured lending industry. This industry has a standard modus operandi with respect to credit provision, which is wholesale funding provided to institutions that in turn lend in volumes to individual clients at a premium and risk-appropriate rates. The scientific basis of this research offers an innovative approach to unsecured lending through the lens of sustainability and concept demonstration.

1.10.1.1. Sustainability

Sustainability is the ability to continue a defined behaviour indefinitely and it is based on three dimensions: social sustainability, environmental sustainability and economic sustainability (Gulliksson 2015). Investigating P2P lending as a solution and a more equitable alternative to unsecured lending in an unbalanced credit market offers an innovative approach to the unsecured credit industry.

Peer-to-peer lending challenges the traditional approach of unsecured lending and offers a seemingly more sustainable and equitable model. There is a fundamental change involved in:

1. understanding, assessing and scoring risk in unsecured lending; and
2. pricing the risk through the interest rate of the loan.

Peer-to-peer lending may offer an atypical approach to risk measurement and pricing that enables a more sustainable unsecured lending solution.

1.10.1.2. Demonstration of the concept

This research shows that the concept of P2P lending is feasible and has utility in South Africa's unsecured lending industry. Essentially a proof of concept is a demonstration with the purpose of verifying that certain concepts or theories have the potential for real-world application (Harrington & Voehl, 2016). This research offers significant scientific value, which reveals that not only could P2P lending offer a sustainable alternative to unsecured lending, but that the participants (lenders and borrowers) active in South Africa would welcome and utilise P2P lending.

1.10.2. Economic value

Economic growth is a key indicator of societal progress (Sekantsi & Kalebe 2015). If South Africa is to move from a developing to a developed nation, wealth creation, economic growth, poverty reduction and income equality need to be at the forefront of developmental agendas. Sustainable development requires that finance be supplied to the points of demand where economic growth can take place in a way that is sustainable and self-sustaining (Okeahalam 2013). This research aims to contribute to developmental agendas and policies through output that highlights a sustainable alternative to the unsecured lending market.

The motivation behind this research is to contribute to the body of knowledge within the unsecured lending market to positively influence theories on unsecured lending.

This research will be of interest and importance to credit providers and borrowers alike. It could start the journey and discussion towards a more equitable and

sustainable unsecured lending market that would ultimately benefit credit providers, borrowers and regulators.

1.10.2.1. Wealth creation strategies

Georges Enderle (2009) provides the following definition:

Wealth is primarily a stock (an economically relevant quantity at a certain point in time); but, in a broader sense, it also includes flows (increasing or decreasing quantities over a certain period of time). Wealth creation may be understood as the act of making a country, group or person richer and more successful. Wealth creation is one of the key, if not the most important, considerations in studies about poverty reduction and alleviation. Wealth creation is the accumulation of assets over time. Assets are generally acquired over time through access to varying sorts of credit. Credit is central to asset and wealth accumulation, which are both fundamental to poverty studies.

1.10.2.2. Economic growth policies

Access to credit boosts the economic growth of a country. Okeahalam (2013) revealed that there is a positive relationship between growth in the use of a range of financial products and the rate of growth of the gross domestic product (GDP) of South Africa.

Rising levels of consumption expenditure by households generally stimulate the economy, whereas slower growth or declines in aggregate consumption expenditure by households have a dampening effect on economic growth. The availability of credit also makes it easier for households to spend (Prinsloo 2002). Another lens is the evidence of micro-credit, which shows that such credit helps entrepreneurs somewhat, but almost never jump-starts significant growth or transforms them into formal businesses (Karlan & Zinman 2011).

The problem lies in the continued access to unsecured credit in South Africa. There is a limited unsecured credit usage cycle an individual can sustain before either default or lack of affordability occurs.

Once an individual or household no longer has access to credit through formal means, there is a decrease in purchasing power. This dampens economic activity, which impacts on the economic growth of South Africa.

Although such expenditure (consumption-driven credit expenditure) can result in positive implications from a macroeconomic perspective, it ultimately weakens the credit health of consumers, which raises concern about the sustainability of consumer credit (NCR 2012). Consumption-driven credit expenditure magnifies both peaks and trough cycles of GDP growth. However, a sustainable unsecured lending model could produce a smoother sustained economic growth cycle.

1.10.2.3. Poverty alleviation strategies

In Sub-Saharan Africa, slum populations are growing at 4.5% per annum, a rate at which populations double every 15 years (Marx *et al.* 2013). The prevalence of slums is highest in Sub-Saharan Africa, where slum dwellers represent 62% of the urban population (UN-Habitat 2012). Over the past 20 years, countries that experienced fast economic growth also achieved the most significant reductions in the proportion of urban households living in slums (Marx *et al.* 2013). Consumption credit induces further poverty, whereas development credit reduces it. Unsecured credit in South Africa is largely aimed at servicing the needs of consumption credit, which dampens poverty alleviation efforts (NCR 2012).

Unsecured lending could be utilised as a tool to reduce poverty. Evidence of this exists in Sub-Saharan African countries where unsecured credit is used mainly for housing, education and agricultural endeavours.

1.10.2.4. Addressing inequality

The use of consumption credit is detrimental to the overall financial wealth of an individual. Due to the high cost of credit and zero returns of consumption expenditure, the continued use of unsustainable products (consumption credit) by individuals will result in a decrease in wealth over time. Inequality is defined as

the existence of unequal opportunities and rewards for different social positions or statuses within a group or society (Davis 2014). Inequality can be divided into labour inequality and wealth inequality measures and additional dimensions such as within-inequality (labour or wealth) and between-inequality (labour and wealth) (Jones 2015). Wealth inequality is the type of inequality this study refers to. Wealth inequality can be divided into savings and investment behaviour and gift giving and inheritance laws (Piketty 2014). Inequality is a result of the interaction of economic, social and political actors (Piketty 2014).

Piketty's theory of capital and wealth inequality premises that wealth grows faster than economic output, a concept he captures in the expression $r > g$, where r is the rate of return to wealth and g is the economic growth rate (Piketty 2014). Intuitively, a higher gap between r and g works as an amplifying mechanism for wealth inequality.

Piketty identifies an important aspect in wealth inequality: return on capital grows at a quicker rate than economic outputs, which include wages. Therefore, the high cost of credit (return on capital for capital producers) essentially increases wealth inequality as the financial returns gained by borrowers are low, possibly negative. Borrowers' wages also grow at a slower rate than the return on capital. An alternative sustainable unsecured lending system could stem or reverse the gaps in the growth of wealth and economic output.

Looking at inequality from a different perspective, Merton (1986) coined the phrase "Matthews Effect". In short, the Matthews Effect is derived from Matthew 25:29 in the Bible: "For whoever has will be given more, and they will have abundance. Whoever does not have, even what they do have will be taken from them." If the credit theory of money is accurate of what microfinance does in practice, microfinance is neither entrepreneurship nor economic development, but rather it would inherently create, maintain or exacerbate inequalities as part of a larger economic system of credit and debt (Hsu 2014). In that sense, it would bring about its own round of Matthews Effects (taking from the poor and giving to the rich) and

not alleviate poverty (Hsu 2014). Therefore, a new sustainable approach to microfinance is required.

A different view of inequality focuses on its links to violence: countries with large income disparities have a higher homicide rate that is almost four times higher than equal societies (The UNODC 2011). Harris & Vermaak (2014) reveal a statistically positive relationship between inequality and homicide rates in South Africa.

1.11. Previous studies

Previous research and studies related to unsecured lending have largely focused on:

1. product and channel development;
2. access to credit;
3. uses of credit; and
4. credit and entrepreneurship (Schumpeterian and entrepreneurship).

There is a distinct lack of literature on sustainable lending alternatives in South Africa, specifically research on P2P lending as a sustainable alternative to unsecured lending.

1.12. Research questions for this study

Research question 1: Does peer pressure result in lower moral hazard and lowering default levels?

Research question 2: When lenders and borrowers have the ability to perform behavioural underwriting, does this result in fewer instances of adverse selection which lowers the cost of credit?

Research question 3: To what extent are peer pressure and behavioural underwriting present in P2P lending as opposed to traditional unsecured lending?

Research question 4: What are the limitations associated with P2P lending in South Africa derived from this study?

1.13. Layout

The layout of the study will be the following:

Chapter 1: Introduction

Chapter 2: Theoretical view of formal unsecured lending in South Africa

Chapter 3: Theoretical view of informal unsecured lending in South Africa with a specific focus on stokvels

Chapter 4: Peer-to-peer lending in South Africa

Chapter 5: Sustainability framework

Chapter 6: Research methodology

Chapter 7: Research findings: Survey

Chapter 8: Research findings: Focus groups

Chapter 9: Research findings: Adapted circles of sustainability framework

Chapter 10: Discussion, conclusions and future research

1.14. Conclusion

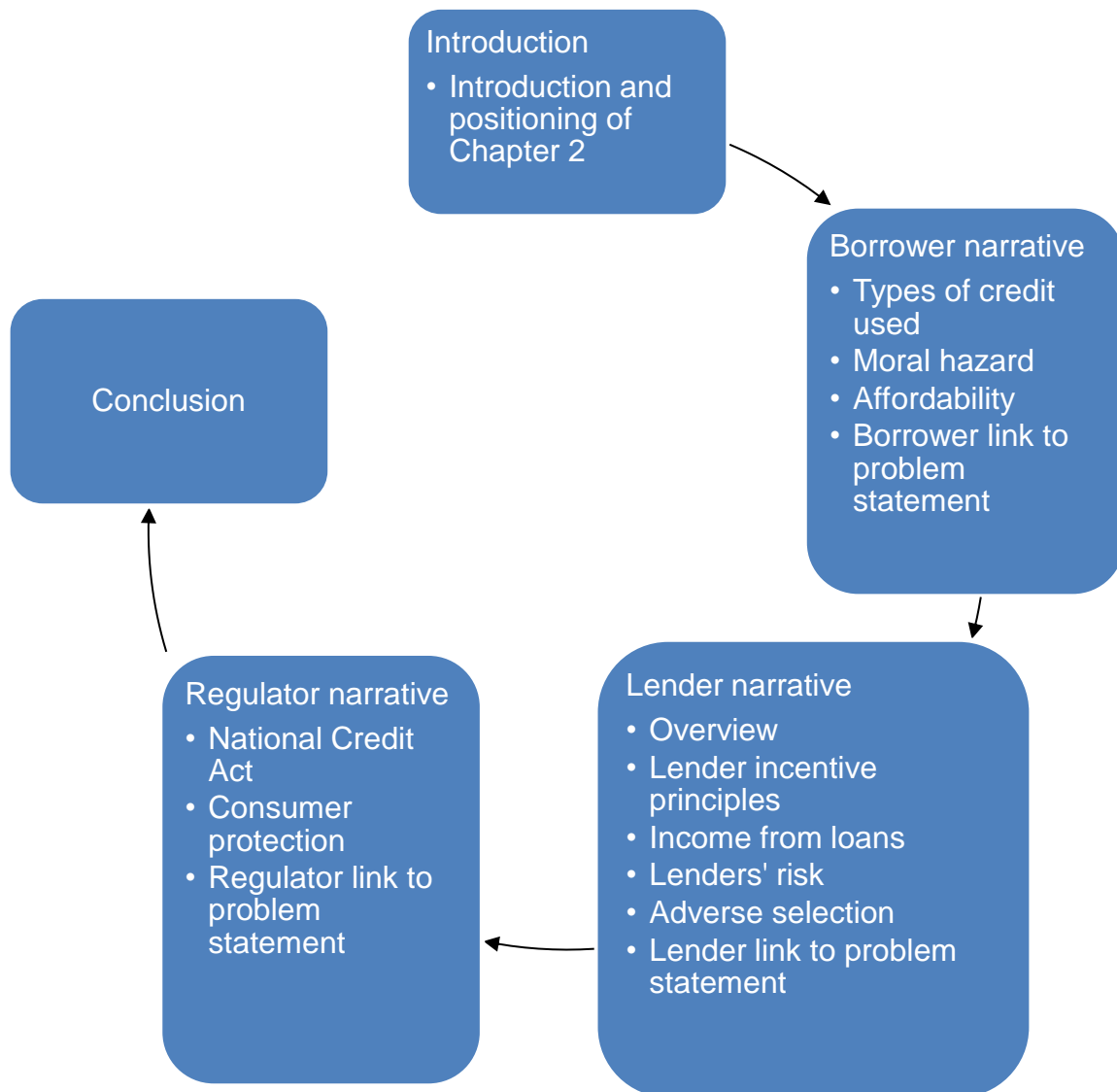
Chapter 1 provided an introduction, background and context to the unsecured lending landscape in South Africa. The South African unsecured lending industry is characterised by high levels of consumer indebtedness, the high cost of credit, increasing defaults, and increasing government intervention.

There appears to be a need for a sustainable alternative to the current unsecured lending model that incorporates theoretical aspects from the formal and informal unsecured lending environments and a social or collective approach.

This chapter provided insights into borrowers, lenders and regulators based on professional experience through a narrative study. The aim was to highlight the opposing drivers and forces of participants in an unsecured lending transaction. Borrowers are characterised by a high cost burden, consumption-driven spending and over-indebtedness. Lenders are characterised by sale volumes while having to manage risk, rising defaults and increasingly complex legislation. Regulators are required to navigate between promoting a competitive unsecured lending industry, protecting consumers and aligning national or political goals. This research aims to contribute both scientifically and economically to the unsecured lending industry in South Africa.

Chapter 2 is dedicated to the theoretical view of unsecured lending. This provides the reader with an understanding of borrowers', lenders' and regulators' interests and pressures. After this chapter, the reader will comprehend the drivers of a participant in a formal unsecured lending transaction.

Chapter 2: Theoretical view of formal unsecured lending in South Africa



2.1. Introduction

Chapter 2 describes the intricacies of unsecured lending in South Africa, beginning with a study into the participants – borrowers, lenders and the government – in an unsecured lending transaction.

2.2. Borrower narrative

For the purposes of this study, a borrower is defined as a deficit-spending unit, as they require capital and money in the short term with the view to repaying it over a period into the future (Viney 2009). In economic terms, borrowers are described as people who do not have financial resources but need them to make an immediate purchase (Thomas 2005).

2.2.1. Types of credit used by borrowers

The immediate purchase of a borrower can be for either consumption or development purposes. A consumption-driven purchase refers to credit that is used to service the day-to-day requirements of an individual or household. Consumption loans consist of loans to purchase food or other daily consumables or durables (Janssens 2007). Parikh (2012) has an expanded definition:

Consumption loans are those which are given by banks to customers in order to meet consumption needs, which may range from consumable purchases, transportation, food, clothing, etc. Consumption-driven purchases do not create any opportunity to build wealth in the future, as the financial returns on these purchases are zero or even negative, and only allow households to manage daily expenses.

Conversely, a development-driven purchase is made with credit that is used to invest in projects or activities that will create wealth in the future by generating a financial return greater than the cost of credit. Janssens refers to investment loans as the alternative to consumption loans. Investment loans consist of loans for

business, agriculture, livestock, land or construction purposes (Janssens 2007). Uses of credit for developmental purposes also include purchasing or renovating a house, or purchasing a vehicle to produce income. Activities include using credit to pay for university tuition where, after gaining a qualification, an individual would have an enhanced ability to earn a better living through their newly acquired skills and knowledge.

Section 41 of the NCA defines a developmental credit agreement as an agreement that includes loans from credit unions, education loans, loans to develop small businesses, loans to build, acquire or rehabilitate low-income housing, or loans used to finance another purpose as prescribed. Developmental credit providers are subject to a higher degree of oversight. In return, these credit agreements are subject to less stringent disclosure requirements.

The distinction between consumption and development loans is important for this study as it relates directly to sustainability. The continued use of developmental credit contributes to financial sustainability, but the continued use of consumption credit does not. This argument holds for the simple reason that when credit is used for developmental purposes, an individual or family's wealth increases over time due to positive financial returns. Consumption credit does the opposite: individuals and families become poorer after the use of this type of credit because their earning potential remains constant, the debt repayment costs are higher and the financial returns are zero or negative. This is referred to as a debt spiral, and it is not sustainable for extended periods of time. Credit used to fund the right things can help a consumer or business, but when used too much or for the wrong things, it can lead to trouble (Merk 2009).

2.2.2. Moral hazard

Moral hazard is any situation in which one person makes a decision about how much risk to take while someone else bears the cost if things go badly (Krugman 2009). Moral hazard in a lending context can therefore be viewed as the borrower's choice to repay a debt or not. According to contract theory, moral

hazard results from a situation in which a hidden action occurs, such as a borrower concealing previous debt obligations from lenders and lenders obtaining an incorrect view of the borrower's affordability (Mas-Colell *et al.* 1995).

At the conclusion of a credit agreement, the lender agrees to disburse a specified amount to the borrower, and the borrower agrees to repay the capital plus additional interest and fees. Holmström (1979) postulated that the problem of moral hazard may arise when borrowers engage in risk sharing when their private actions affect the probability distribution of the outcome.

The hidden action referred to by Mas-Colell, Whinston & Green (1995) and the private action referred to by Holmström (1979) in a lending context is the borrower deciding not to repay the specified debt obligation; the borrower has the ability (funds available), but chooses not to repay their debt obligation.

Moral hazard can be further divided into two types when it involves asymmetric information of the outcome of a random event. Information asymmetry is one party receiving insufficient information during the process of transaction (Mishkin 2011). An "ex-ante" moral hazard is a change in behaviour prior to the outcome of a random event, whereas "ex-post" involves behaviour after the outcome (Jenkins 2010). This is important as the information used in the credit decision may not be accurate after a change in behaviour by the borrower. Perhaps credit would not be extended by the lender if the new behavioural change were known.

Moral hazard is a behavioural change dilemma concerned with the borrower, and it arises when a change in the borrower's behaviour makes it less likely that the loan will be paid back (Rehman 1998).

Moral hazard has negative outcomes for lenders in terms of default and/or loss and for borrowers in the sense that they will be blacklisted, severely constraining further access to credit among registered formal lenders. Positive incentives, such as the possibility of creating further wealth, compel borrowers to reduce the possibility of moral hazard.

2.2.3. Affordability

A debt contract establishes the legal rights and obligations for those who receive financing (borrowers) and those who provide it (lenders). Essentially, the borrower promises to repay the principal plus the required interest in a stipulated amount of time (Bebczuk 2003). These instalments smooth the repayment of the amount received over the term of the loan. Repayments are possible only when there is an ability to repay – when the borrower’s monthly income exceeds monthly costs by at least the amount of the instalment.

Borrowers become over-indebted once their monthly costs plus their loan repayments exceed their monthly income. In this situation, a borrower is forced to either ration their monthly spending and loan repayments, or enter into another loan contract to pay off an existing loan as a last-ditch effort to stave off default.. Using loans to pay off other loans and allocating more than 50% of monthly net income to loan repayments indicates a debt spiral, or over-indebtedness (Mashigo 2006). Over-indebtedness largely excludes individuals from formal credit provision and access to future credit, as the risks of lending to these individuals is not only extremely risky, it is prohibited in terms of the NCA. A study conducted by Karlan and Zinman (2006) revealed insights into the South African unsecured lending industry by showing that loan sizes are far more responsive to changes in loan maturity than to changes in interest rates, which is consistent within binding liquidity constraints. According to Attanasio, Goldberg and Kryiazidon (2005), the loan demand of liquidity constrained agents may respond to loan maturity as well as loan price. The basis for this finding is that longer maturities reduce monthly loan payments effectively permitting more borrowing (Karlan & Zinman 2006).

2.2.4. Borrower narrative link to problem statement

Borrowers in South Africa are generally characterised by low affordability, high indebtedness and being consumption driven. This is a dangerous combination over the long term, as it eventually forces borrowers into a moral hazard dilemma

where they must either curb expenditures or decide which expense (including loan repayments) to not pay.

When borrowers are faced with the high cost of credit, low affordability, consumption-driven debt expenditure and moral hazard, there is a sustainability problem on the demand side of the lending industry. Peer-to-peer lending may address underlying borrower challenges, such as low affordability, consumption-driven debt expenditure and moral hazard, differently.

2.3. Lender narrative

Lenders are known as surplus units or users as they have capital or money to lend to borrowers with the view of making a return over the repayment period (Viney 2009). Credit is an important agent for the economic growth of developing countries. Economic growth refers to the increase in per capita real income and it implies general growth. The development of industries requires capital, but capital formation is very low in developing countries. Credit increases investment, production and economic growth (Jain 2006). It is a fundamental cornerstone of an economy in which individuals and businesses have an incentive to increase their wealth.

A lender is defined under the NCA as a registered entity that provides money, either physically or electronically, to a borrower in a contractual agreement that stipulates loan terms and conditions (NCA 2006). These terms and conditions are aligned with the NCA.

Lenders offer individuals various types of loan products, ranging from large, secured mortgage loans to small, unsecured personal loans. The lender makes a return on the credit provided through interest charges, monthly and initiation fees, and credit life insurance premiums.

2.3.1. Lender overview

There has been a mushroom effect in the number of registered credit providers for the provision of unsecured credit. More and more lenders are competing for a share of the market as it offers superior returns. High returns have attracted significantly increased amounts of capital, and therefore the supply of credit from many sources (Butters 2013). Increased lender competition may result in lenders who, in the search of loan volumes, begin to supply credit to riskier borrowers. Taking on riskier borrowers may have two effects: the lender may be exposed to a higher level of default by borrowers and borrowers, who are considered risky, receive further credit and are pushed deeper into a debt spiral.

There has also been marked growth in other lenders such as pension-backed lenders, microfinance houses, agricultural lenders, insurers, non-bank mortgage lenders and securitised debt. Interestingly, independent retail chain stores, such as Cash Converters and Bed City, have begun to follow the African Bank model of credit provision by offering credit to their customers to buy their products.

The largest participants in the unsecured credit market include African Bank, Capitec, First National Bank, Standard Bank, Absa, Nedbank, FinBond, Atlas Finance and Bayport.

2.3.2. Lender incentive principles

Lenders are incentivised to increase the margin between their input costs (cost of capital and operational overheads) and their revenue (interest and non-interest income) as described in section 2.3.3.

Lenders' input costs comprise fixed and variable expenses. Fixed costs are largely attributable to the cost of client acquisition, cost of capital, operational system management and staff costs. Variable costs are linked to loan provision, credit bureau checks, bank account validation, non-authenticated early debit order system (NAEDO), debit order collection fees and other monitoring costs.

The lender's objective is to achieve profitability which can be achieved by:

- raising funding from sources at an appropriate cost of capital;
- selling loans to risk-appropriate clients at a profitable price;
- ensuring repayments are as high as possible with the lowest monitoring costs; and
- repaying funders the minimum required return and reinvesting available profits back into the business to cover costs and future loans.

Sales/profit and risk/default are ever-present in credit provision.

2.3.3. Income from loans

For the immediate use of funds, borrowers are required to repay the lenders the capital they use as well as an additional return. The additional return is generally composed of four sources: interest, monthly administration fees, initiation fees and non-mandatory credit life insurance premiums (NCA 2006).

The first three sources of revenue are regulated, and there are prescribed maximum limits. As for credit life insurance, the regulator is in the process of prescribing maximum premiums lenders are able to charge borrowers (Du Preez 2014).

The Consultative Group to Assist the Poor (CGAP) defines lenders' returns in the following formula: $\text{income from loans} = \text{cost of funds} + \text{loan loss expense} + \text{operating expense} + \text{profit}$ (CGAP 2013). Therefore, income from loans can be broken down into four elements: cost of funds, loan loss expense, operating expense and profits.

Lenders fund their loans with a combination of equity (their own money) and debt (money borrowed from depositors or outside lenders) (CGAP 2013). This funding mix is the weighted average cost of equity and debt funds used, which is the minimum return required by equity and debt holders. In essence, this amount is the minimum return a lender would need to make as a return on the loan

agreement. The amount typically accounts for inflation and the time value of money. Interest is a fee paid by a borrower of assets to the owner as a form of compensation for the use of the assets. It is most commonly the price paid for the use of borrowed money or money earned by deposited funds (Sheffrin 2003). The interest charge on a loan would need to cover the cost of funds and contribute towards covering the other three elements (monthly administration fees, initiation fees and credit life insurance premiums). The important point is whether the interest rate is high or low relative to the rate of appreciation of some standard (Dimand & Betancourt 2012).

Loan loss expense is the provision of bad debt in the lender's book. Most unsecured loans are not backed by collateral, or by collateral that is unlikely to cover a defaulted loan amount once collection expenses are taken into account (CGAP 2013). The loan loss expense is essentially the pricing of a loan as defined by the borrower's risk profiles through exposure, probability of default, and individual characteristics and attributes. This cost – essentially a potential bad debt premium – is taken on by the borrower to compensate the lender for the risk of default. The higher the likelihood of default, the higher this premium will be.

The borrower's risk is calculated using borrower-provided information (employment history, salary data and personal details), credit bureau data and application to the lender's internal scorecard (a reflection of the lender's risk appetite).

Operating expenses include the costs of implementing the loan activities, personnel compensation, supplies, travel and the depreciation of fixed assets, among other things. Operating expenses account for the majority of the income of most lenders' loan portfolios, so this component is the largest determinant of the rate the borrowers end up paying (CGAP 2013).

The final component of lenders' returns is the profit margin. Profit is defined as the difference between the income and expense of a company (Campbell 2009). In financial institutions, net profit is often measured as a percentage of assets

employed, or as a percentage of the shareholders' equity investment (CGAP 2013).

Figure 2.1 shows the breakdown of the various revenue streams earned by lenders. Interest rates make up one of the larger revenue streams for lenders (NCR 2012). The monthly administration fees (service fees) and credit life insurance account for 11.2% of the revenue for lenders, and initiation fees account for 9.7% of lender returns.

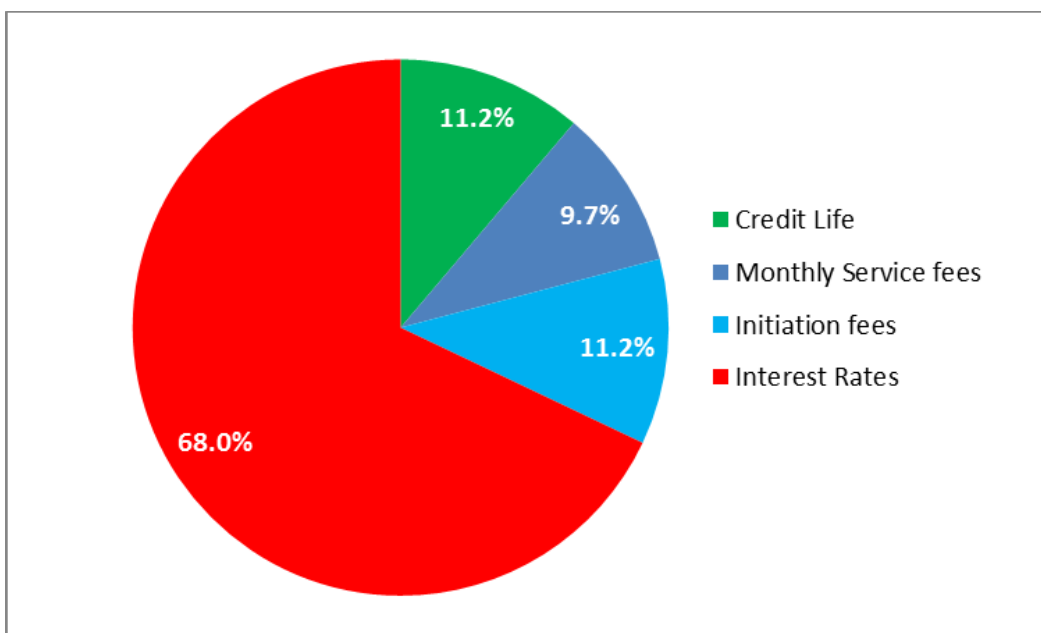


Figure 2.1 Breakdown of revenue streams that lenders earn from loans

Source: NCR 2012

The CGAP lenders' returns formula is a useful high level consideration that warrants a deeper analysis of the actual changes to the capital of the loan. These include interest rates, monthly fees, initiation fees and credit life insurance premiums.

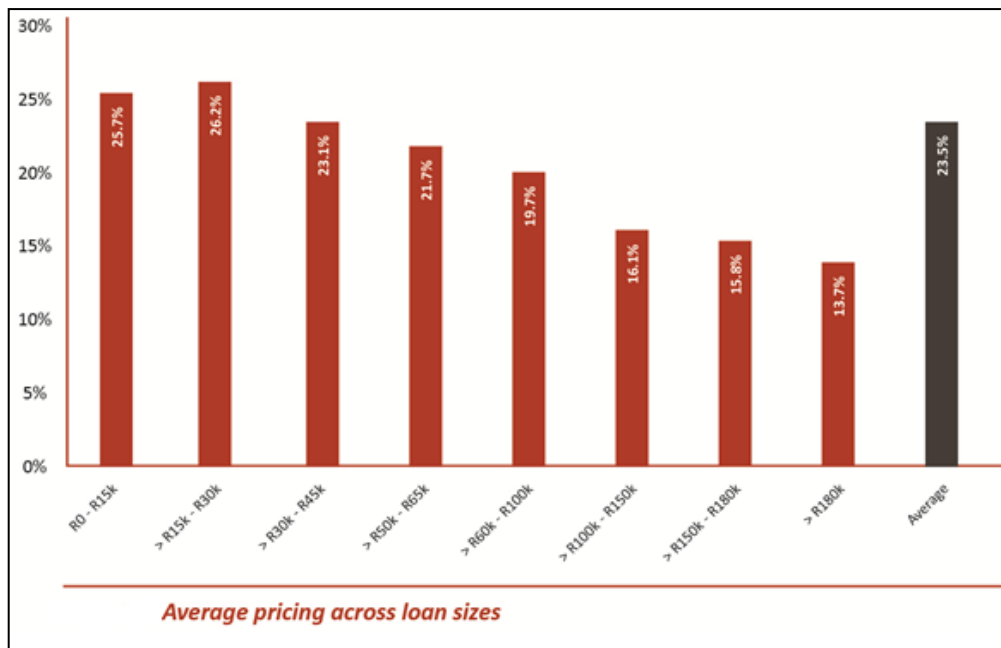


Figure 2.2 Average pricing across loan sizes

Source: NCR 2012

Interest rates: Interest rates are capped at a maximum level by the NCA through a formula based on the repo rate.

Figure 2.2. shows various loan sizes and the average interest rates charged across the category of loans by all lenders. Notice that loans of less than R30 000 are charged the highest average interest rates when compared with the average rates on larger loans. The average interest rate charged across all loan sizes is 23.5%.

The fact that unsecured credit transactions are priced so much higher than secured credit transactions reflects the risks, as well as the higher costs, associated with this specific credit provision (CGAP 2013). The average interest rates also give an indication of the risks associated with the types and sizes of loans – higher-risk borrowers pay higher interest rates (Parkin 2010).

Some researcher, namely Menger (1934) and Samuelson (1977), show that utility functions determine price and that utility price, rather than fair price, ruled. The basic idea is that lenders base decisions on an expected (concave) utility

function of wealth rather than on the expected value (a linear function) of wealth (Menger 1934). From Figure 2.2. one can infer that smaller loans may carry higher risks..

Monthly service fees: The NCA has identified monthly service fees as a critical element that requires regulation in an attempt to bring down the total cost of credit. The monthly service fee covers the cost of administering a credit agreement, which is the operational cost of the credit provider and covers rent, labour, communication, banking, processing of repayments and any other costs related to the administration of a credit agreement (Gazette No. 39379 2015).

The monthly service fee is capped by the NCA. It is important to note that monthly fees are added to each monthly instalment.

Initiation fees: The third revenue stream is initiation fees. These are one-off fees credit providers charge consumers for entering into a credit agreement, and include expenses related to the administration of granting the borrower the loan (NCR 2012). The initiation fees are capped by the NCA according to the type of credit agreement. An initiation fee must only be charged when a new credit agreement is established with a consumer (Gazette No. 39379 2015).

Important differentiators between monthly service fees and initiation fees are when the costs are incurred and how they are charged. Monthly fees are added each month to the credit instalment, whereas initiation fees are incurred at the beginning of the term of the credit agreement and are amortised over the duration of the loan. This essentially means that the initiation fee may form part of the capital balance outstanding on the loan, and therefore attracts interest if the borrower elects not to pay this upfront.

Credit life insurance: The final revenue stream for lenders is the income associated with credit life insurance premiums. Many lending institutions have arranged life insurance for their borrowers. Usually this coverage is on a group basis and provides that any remaining indebtedness is cancelled at the death of the borrower (Belth 1985). Credit life insurance includes cover payable in the

event of a consumer's death, disability, terminal illness, retrenchment, or other insurable risk that is likely to impair the borrower's ability to earn an income or meet the obligations under a credit agreement (NCA 2006).

Credit life insurance protects the dependents of the borrower by removing the obligation to repay the loan after their death, and protects the borrower against having to maintain credit repayments in the event of disability or retrenchment (FinMark Trust 2013).

The credit life policy premiums, which decrease the risk of default in the event of the borrowers' death, are paid by the borrower to the lender or linked insurance company. The borrower may cede an existing insurance policy to the lender to cover the debt, or take out a new credit life policy with the lender. Credit life insurance is a risk-mitigation technique used by lenders yet paid by borrowers.

The credit life payout decreases in relation to the repayment, making it a decreasing sum-assured product (FinMark Trust 2013). However, the premiums paid by the borrower remain constant throughout the loan contract. The margin on credit life insurance is estimated at 49%, with a 23% claims ratio and 28% operating expense (FinMark Trust 2013).

In 2011, government formed a Consumer Credit Insurance Task Team, jointly led by National Treasury and the Financial Services Board, to investigate the state of the consumer credit insurance industry in South Africa (FinMark Trust 2013). The NCR has published a draft on affordability guidelines and amendments that suggests R4 per R1 000 to be a more reasonable all-inclusive premium and a cap for the premium rate (FinMark Trust 2013).

Similar to the monthly fees charged by lenders, insurance premiums are charged monthly. These are not amortised over the loan, but are added to the monthly instalment paid by borrowers.

2.3.4. Lender risk

The risk associated with credit provision is the risk of default. A default risk is the possibility that the counterparty in a financial contract will not fulfil a contractual commitment to meet their obligations stated in the contract (Bielecki *et al.* 2002). When a default occurs, the lender has a number of methods of recourse, either through debt restructuring, debt counselling or through the legal system and courts. If a borrower never repays their loan, the lender ultimately writes this debt off as a loss, and shareholder value is destroyed in the write-off process. It's important to note that unsecured loans can be as large as R300 000, hence a write-off could have substantial effect on shareholder value, especially if there are numerous write-offs.

Writing off debt is important not only to individual credit agreements, but also to the entire lender's loan portfolios. Lenders usually factor in a percentage loan-loss ratio into their pricing across all their loans. This means that a performing borrower effectively subsidises defaulting borrowers and the lender's debt write-off. The bad debts that are written off are known as default costs (Khan 2004). This is crucial to the pricing of interest rates across loans and to the total cost of credit for borrowers.

Lenders have an incentive to price loans as high as possible in order to increase their returns and boost shareholder value. This incentive is curbed somewhat by managing the risk of their borrowers defaulting and government regulation. This is essentially managing an operational risk – the risk that arises from agents who act on behalf of the organisation but pursue actions that are not in the best interest of the stakeholders, but rather their own (principal-agent risk) (de Jongh *et al.* 2013). One of the most significant risks of a major corporation is the principal-agent risk. Managers representing the corporation should be well controlled, so that agents who take on too much risk on behalf of the organisation are penalised (Andersen *et al.* 2011). This is part of the volume versus lending risk lenders face.

2.3.5. Adverse selection

Adverse selection refers to the process in which undesired results occur when buyers and sellers have asymmetric information. The term was originally used in insurance to describe a situation where an individual's propensity to buy insurance and the quantity purchased positively correlates with their risk of loss, and the insurer is unable to price for this correlation (Chandler 2007). Adverse selection may be because of private information known only to the individual (information asymmetry), or because of regulations or social norms that prevent the insurer from acquiring specific information. The latter scenario is referred to as regulatory adverse selection (Polborn *et al.* 2006).

In a lending context, adverse selection is when the borrower does not have the ability (funds) to repay the agreed amount. The lack of ability to repay may have been concealed by the borrower at the commencement of the debt agreement (deliberate), or not yet known to the borrower at the time of signing, and therefore not revealed to the lender. The borrower may have the moral inclination to repay their debts but not the financial resources to do so.

Adverse selection arises from asymmetry of information and occurs before the transaction (known or unknown), as borrowers with bad credit risks are usually those who most actively seek out loans. Thus, the parties who are most likely to produce an undesirable (adverse) outcome are the most likely to be selected for credit (Rehman 1998). Adverse selection looks at the current ability of the borrower to repay their loan. It considers major future events such as death and loss of employment, but is not otherwise predictive of alternative future events. The cost of adverse selection not only includes the amount by which the purchase is defaulted, it also includes the loss incurred from driving legitimate business out of existence (Akerlof 1970).

An objective of lenders is to ensure only qualified borrowers are approved through the credit process, and borrowers who receive credit should be only those who will be able to repay a loan. Lenders need to ascertain which individuals in the

marketplace are considered good risks and which are not. Lenders may retreat from lending because of the uncertainty of adverse selection and risk identification, an outcome of the “lemons problem” analysis described by Akerlof in 1970.

The lemons problem is described as an asymmetry of information that arises when the parties to a transaction do not have the same degree of information necessary to make an informed decision (Akerlof 1970). Adverse selection “appears” (or at least is possible) whenever the individual or group insured has freedom to buy or not to buy, to choose the amount or plan and to persist or to discontinue as a policyholder (Akerlof 1970). Akerlof specifically states that the “lemons principle” can be applied to the rates charged by a moneylender. A key consideration here is the availability and reliability of information, as information may act as a type of collateral for the lender, and it needs to be reliable for decision-making purposes.

2.3.6. Lender narrative link to problem statement

Lenders are incentivised to write more loan deals each month to produce a wider margin between their cost of funding and the revenue earned. The margin is decreased by the high cost of funding, a high number of bad debts, and high administration and collection costs. The margin is increased through high collection rates, lower monitoring costs and cross-selling. The higher the margin, the more profitable a lender becomes.

2.4. Regulator narrative

Government regulators establish and enforce operating regulations aimed at promoting a smooth-running, efficient financial system, and protecting the public from fraud and other abusive practices (Burton & Brown 2009). The government, through the NCR, is an integral participant in the unsecured lending industry. Legislation instituted by government in the form of the NCA is an attempt to standardise the unsecured lending industry practices.

2.4.1. The National Credit Act, 2005 (Act No. 34 of 2005)

The NCA was instituted on 1 June 2007. Its purpose is described here:

To promote a fair and non-discriminatory marketplace for access to consumer credit and for that purpose to provide for the general regulation of consumer credit and improved standards of consumer information; to promote black economic empowerment and ownership within the consumer credit industry; to prohibit certain unfair credit and credit-marketing practices; to promote responsible credit granting and use, and for that purpose to prohibit reckless credit granting; to provide for debt reorganisation in cases of over indebtedness; to regulate credit information; to provide for registration of credit bureaus, credit providers and debt-counselling services; to establish national norms and standards relating to consumer credit; to promote a consistent enforcement framework relating to consumer credit; to establish the National Credit Regulator and the National Consumer Tribunal; to repeal the Usury Act, 1968, and the Credit Agreements Act, 1980; and to provide for related incidental matters.

The NCA's overarching purpose was to create a single system of credit regulation and for the NCR to administer the credit industry. It seeks to promote the social and economic welfare of South Africans, and a fair, transparent, competitive, efficient and accessible credit market for all (Niemi *et al.* 2009).

The latest regulatory changes made by government were the enactment of the National Credit Amendment Act. An excerpt from the Credit Amendment Bill (CAB), which preceded the act, reveals the following thinking and reasoning for it:

Since the coming into operation of the NCA, there have been from time to time implementation and interpretation challenges in respect of credit regulation. These are challenges that necessitate amendments to the Act in order to ensure proper and better implementation of the Act, and also to ensure certainty and clarity where the Act seems to create uncertainty" (CAB 2014).

The main objective of the CAB is to address implementation challenges that have materialised during the implementation of the NCA and to make some improvements (CBA 2014). The most notable amendments to the NCA include the following items:

1. The registration of all credit providers, regardless of number of credit agreements and size of book.
2. Automatic removal of adverse consumer credit information. A lender must submit to all registered credit bureaus within seven days after settlement by a consumer of any obligation under any credit agreement.
3. Application of prescription on debt. No person may sell a debt under a credit agreement to which the NCA applies and that has been extinguished by prescription under the Prescription Act, 1969 (Act No. 68 of 1969). This gives a prescription length of three years on debt.

At the core of the NCA and CAB are the concepts of responsible lending and over-indebtedness. Lenders are responsible for assessing the indebtedness of consumers to make sure new credit extended to borrowers is not considered reckless, as outlined in the NCA. A lender may be seen as extending reckless credit if, at the time of the loan agreement, the borrower does not have a realistic chance of fulfilling the repayment demands (NCA 2006).

Credit is lent recklessly if the credit provider took no steps to assess the proposed consumer's understanding, appreciation of the risks, repayment ability and debt history, or that, after having conducted such an assessment, the credit provider still entered into a credit agreement with the consumer despite the fact that the preponderance of information available to the credit provider indicated that the consumer did not understand the costs, risks and obligations, or that by entering into the credit agreement it would make the consumer over-indebted (Niemi *et al.* 2009).

The NCA places assessment responsibility on the lender and makes them accountable for their actions. To monitor industry participants, the NCA also established a National Consumer Tribunal, which is responsible for hearing cases against credit providers who have contravened the NCA (Niemi *et al.* 2009). The Tribunal is also empowered to issue fines where it is deemed necessary (Niemi *et al.* 2009). If a lender is found to have extended reckless credit, there could be fines

imposed, revocation of their lending licence, and a declaration of the credit agreement to be null and void.

2.4.2. Consumer protection

Government also instituted further consumer legislation that escalates the bargaining power and rights of consumers. The Consumer Protection Act (CPA) and Treating Customers Fairly (TCF) framework span numerous industries, but are both applicable in conjunction with the NCA to unsecured lending transactions. Figure 2.3 provides a summary and comparison of the CPA, TCF and NCA.

Comparing the CPA, TCF and NCA			
	Consumer Protection Act (CPA)	Treating Customers Fairly (TCF)	National Credit Act (NCA)
Role	Operational rules for consumer protection and fairness for all consumers irrespective of products or services, across all industry sectors.	Principles for consumer protection specifically for financial institutions.	Operational rules around promoting fair, transparent and sustainable credit market as well as consumer protection standards specifically for lending products.
Key differences	Application limited to natural people, legal entities whose asset value or turnover is under R2 000 000 and associations and franchisees irrespective of asset value or turnover.	Focused on helping customers fully understand the features, benefits, risks and costs of the financial products they are intending to purchase. It also minimises the sale of unsuitable products by encouraging best practice before, during and after a sale. This is particularly relevant for financial service products due to their complex nature.	Consumer provisions are primarily in respect of credit provision for smaller loans (under R500 000). It is primarily aimed at avoiding reckless lending and over indebtedness of consumers. It dictates the factors which must be taken into account when calculating the amount which can be lent to any one customer.
Commonalities	All these regulatory and compliance standards focus on the consumer in terms of the disclosure of terms and conditions, fair marketing practices and transparent pricing.		

Figure 2.3. Comparing the CPA, TCF and NCA

Source: Deloitte Touche Tohmatsu 2012

The common thread across these frameworks is the focus on the consumer in terms of the disclosure of terms and conditions, fair marketing practices, and transparent pricing (Deloitte Touche Tohmatsu 2012).

The asymmetry of information between retail financial services, consumers and financial institutions means that consumers are particularly vulnerable to unfair treatment. Typically, financial institutions have far more expertise and resources available to them in designing, distributing and servicing financial products than consumers have available to them in making decisions about financial transactions. The nature of financial products and services is such that, in many instances, the consequences of unfair treatment or poor decisions are only felt some time (in some cases, many years) after transacting. In South Africa, these challenges are exacerbated by low levels of both basic and financial literacy, increasing the risk of consumer exploitation (FSB 2011). Conduct legislation, such as the CPA, TCF and NCA, aim to formalise the practice of lending while empowering consumers.

2.4.3. Regulator narrative link to problem statement

Regulators aim to standardise industry practices while empowering and protecting consumers. Regulation of the unsecured lending industry is in the form of the NCA and, more recently, the CAB. This regulation should result in a well-functioning industry, however, we have seen two credit amnesties in South Africa – the first in 2007 and the second in 2014. The first amnesty was a market alignment exercise for the enactment of the NCA, but the second amnesty was a symptom of an unsustainable market. Peer-to-peer lending may offer a different perspective to unsecured lending regulation, which may mean amendments to current legislation are required.

2.5. Conclusion

The purpose of Chapter 2 was to describe, in detail, the participants in an unsecured lending transaction, as well as highlight their incentives, motivations, rights and duties.

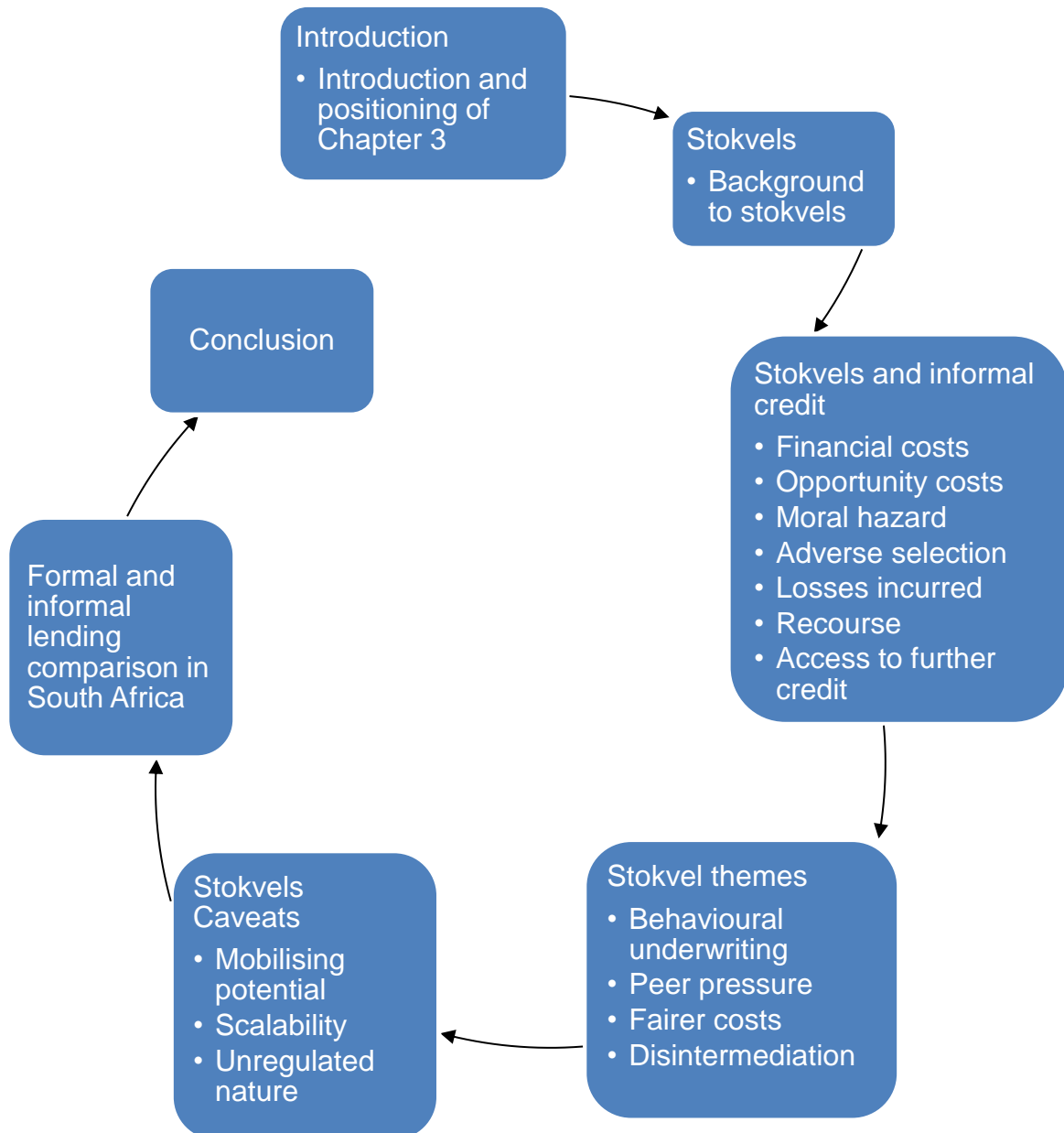
Borrowers in South Africa are generally characterised by low affordability or, conversely, high indebtedness and consumption-driven debt spending. This is not

ideal in order to maintain a sustainable demand within the unsecured lending market. When borrowers are faced with a high cost of credit, low affordability and consumption-driven debt expenditure, a moral hazard dilemma appears and the demand side of the lending industry faces a sustainability problem.

Lenders are driven by loan sales volumes to increase the margin between their cost of funding and the revenue they earn. The lender is faced with the risk of default once loans are disbursed to clients, which potentially means a loss of capital, future revenue and shareholder value. Lenders are faced with the risk of adverse selection given the average borrower's financial health. These high risks lead to higher risk related charges, resulting in higher costs to the borrowers.

Government aims to enable the unsecured lending market through standard practice and protect and empower consumers. However, credit amnesties are a symptom of an unsustainable industry (case in point being the one in 2014). The interaction between lenders, borrowers and government is at the centre of the discussion of sustainability of this industry. These relationships are critical in understanding the qualities and characteristics of a sustainable solution in the unsecured lending environment. Peer-to-peer lending may address the highlighted shortcomings of borrowers, lenders and regulators, and lead to a more sustainable and equitable unsecured lending market.

Chapter 3: Theoretical view of informal unsecured lending in South Africa with a specific focus on stokvels



3.1. Introduction

Chapter 3 provides a theoretical view of informal unsecured lending in South Africa and highlights aspects that make informal lending a worthy study, especially with regard to stokvels.

3.2. Background to stokvels

Informal lending is defined as a lending transaction between an individual and a lender that is not registered at the NCR to provide credit (NCA 2006).

Unsecured informal lending has existed for many years in South Africa. The first stokvel, referred to as a “bantu burial society”, was started in 1932 (Lukhele 1990). Stokvels traditionally functioned in black communities as a means of economic survival during the years of oppression (Lukhele 1990).

Andrew Lukhele, founder of the National Stokvel Association of South Africa, defines stokvels as a type of credit union in which a group of people enter into an agreement to contribute a fixed amount of money to a common pool on a regular basis (Lukhele 1990). The common pool can be seen as social capital, the connections among individuals, social networks and the norm of reciprocity and trustworthiness that arise from them (Putnam 2000). In many senses, different social capital networks should be seen as a symptom, rather than a source, of inequality (Irving 2005). According to Lukhele (1990), an important aspect is that stokvels act as an economic survival mechanism for its members.

A stokvel can also be described as a rotating credit and savings club that offers its members an informal way to save and obtain credit through the efforts of a group or community (Lukhele 1990). The members of the stokvel decide how to utilise the funds. Within the context of informal lending, stokvels, provide an interesting case study (Lukhele 1990). Stokvels offer a generalised reciprocity, which is an unconditional assistance offered by an individual on the understanding that should the need arise, similar aid would be offered in return (Putnam 2000).

Stokvels play an important role as economic and social instruments in smoothing consumption and in improving the living standards and increasing the utility of households (Mashigo & Schoeman 2010). According to research by African Response (2012), stokvels have the following characteristics.

- They comprise 42.6% males and 57.4% females.
- The stokvel population predominantly falls between the ages of 25 and 49 (78.2%).
- Members mainly fall into LSM 5 and 6 (32% and 27% respectively). Stokvel members are generally economically active members of society, with 83% being employed in some form. More than 50% of those interviewed in all the provinces earn less than R5 000 a month.
- Stokvels are generally well structured and managed. Most stokvels have a chairperson and portfolio committee to manage accounts, as well as define a constitution.

Different types of stokvels exist: savings, credit and capital-generating club, and funeral associations (Verhoef 2002). Stokvels are categorised into five main types: general savings, burial societies, groceries, birthdays and investments. The general savings stokvel has the highest membership, followed by the burial society and the groceries stokvel. Birthday and investment stokvels are newer and have fewer members (African Response 2012).

The names of the stokvels denote their purposes. One is a general savings vehicle, whereas others provide savings towards a specific purpose such as funeral and burial costs, or to pool funds to buy groceries in bulk and receive a discount. The birthday stokvel aims to provide the member whose birthday it is that month with additional funds through group savings (Lukhele 1990). Bonding social capital is introspective and reinforces exclusive groupings, allowing for the mobilisation of solidarity (Putnam 2000).

An interesting evolution in stokvels is their new investment arm. These stokvels are generally supported by higher earners who contribute more money each

month. The pooled funds are used to purchase assets such as shares, unit trusts, and rental properties that generate income for members (African Response 2012).

Stokvel contributions are collected at monthly gatherings and are generally deposited into stokvel accounts at banking institutions. South African banks have started taking advantage of the stokvel opportunity (Ndalana 2014). Recent evidence from microfinance suggests that the frequency of meeting with others to discuss micro-loans is positively associated with the repayment rates, thus helping to avoid self-control problems due to a wish for immediate gratification (Libson 1997), which increases default risks.

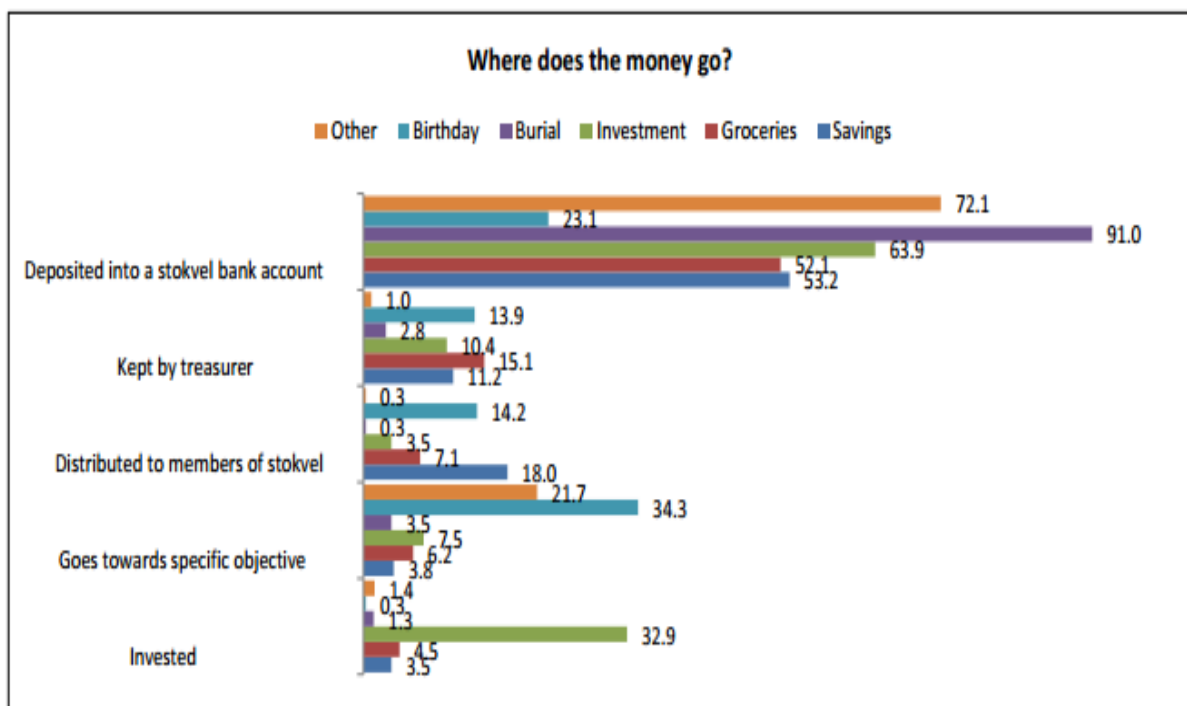


Figure 3.1 Uses of different stokvel contributions

Source: African Response 2012

Membership to the various types of groups is not exclusive to one stokvel, with African Response’s research indicating an average of 1.3 stokvels per member. African Response (2012) estimates there are 8.6 million individuals belonging to 421 000 stokvels in South Africa who collectively save R25 billion a year. The membership numbers and amounts collected are increasing year on year.

3.3. Stokvels and informal credit

An interesting aspect of stokvels is credit provision. Although stokvel members contribute and save towards a goal, the pooled funds accumulate in the stokvel's bank account. Accumulating funds allows the stokvel to provide credit to its members and earn a return. In many black communities, it is common to approach a stokvel first for credit, then friends or employers, then banks (Oosthuizen 2002).

Stokvel members who need a loan approach the chairperson or portfolio committees to apply for it. There are usually minimum requirements that need to be met to qualify for a loan from the stokvel, but the vetting process relies heavily on trust between members (Oosthuizen 2002). New members are invited to join only after their reliability has been established, as trust and loyalty are very important for a stokvel to function successfully (Oosthuizen 2002). This trust is borne out of the fact that the stokvel is made up of people from within the same social circle, including family, friends and neighbours, with a common bond. Trust serves as a means to mitigate risk (Irving 2005). Borrowers have several incentives to repay loans, including increasing future loan sizes following good repayment behaviour (Karlan & Zinman 2006).

The stokvel members contribute their own money to their group for the opportunity to access credit at a lower rate than what the member would have to pay at a formal lender. Members are enticed to join the stokvel because of the low interest or premiums partly consisting of a high joint liability payment or a joint fixed cost (Mashigo 2011).

What is uppermost in poor people's considerations is not money, goods or services per se, but the quality of the relationship that they can establish with the source of these goods and services (McGregor 1989).

Stokvels are important to this study as they offer an informal solution to traditional unsecured lending. There are specific elements within stokvel credit that need to be addressed, including: financial cost, opportunity cost, moral hazard, adverse selection, losses incurred, recourse and access to further credit.

3.3.1. Financial cost

Within the context of stokvel lending, the costs associated with credit are less than those of formal lenders due to lower cost of capital and overhead-related costs. However, the cost of credit is not governed by the NCA and could be misused by stokvel members. Having said this, there is a strong community element present within stokvels that fosters trust and a willingness to assist fellow stokvel members when the need for credit arises (Ndalana 2014).

3.3.2. Opportunity cost

The opportunity cost attached to consumption credit is high. As previously stated, the cost burden of unsecured loans along with zero or negative financial returns from the use of the loan does not ultimately create wealth for the borrower.

In the study by Matuku & Kaseke (2014), it was revealed that loans from stokvels by its members were used to accumulate assets such as housing and land. The decision to borrow from a stokvel is not taken lightly, and borrowers generally do not use their credit frivolously.

3.3.3. Moral hazard

There is a lot of peer pressure to perform in terms of loan repayments within stokvels. Peer pressure is exerted on each member, and members are encouraged to be financially disciplined, responsible and to commit to the group to maintain their reputation (Mashigo 2011). Even in cases where the level of household debt is overwhelming, stokvel members would find resources to perform on their stokvel loan, even if this means borrowing further from formal institutions. Stokvel members found teamwork, a sense of belonging and collective responsibility critical to ensure that borrowers repay their loans in a timely fashion and to ensure the safety of their contributions (Matuku & Kaseke 2014). Borrowers would not choose to ostracise themselves from the community in which they live.

This corresponds positively with the idea that stokvel lending induces a higher degree of peer pressure.

3.3.4. Adverse selection

Borrowers are subjected to very strict behavioural underwriting rules before a loan is granted within a stokvel. The stokvel strictly vets each borrower based on their previous stokvel behaviour and membership, including direct and indirect interactions, over an extended period. Stokvel membership is primarily based on the personal relationships and trust that exist among members (Theime 2003). The community assesses the borrower's behaviour from data sources such as family activity and reputation, contribution to the community, and whether they are good parents. In understanding a person on such a granular level, the probability of lending to a defaulting borrower lessens. Within the stokvel, trustworthiness among the members themselves was vital (Matuku & Kaseke 2014). The probability of adverse selection decreases because of the nature of financial and non-financial behavioural data included in the credit decision. Stokvel members only lend money to people whom they know and trust (Matuku & Kaseke 2014).

3.3.5. Losses incurred

Any losses incurred through credit provision in a stokvel directly negatively affect the other members of the stokvel. As the stokvel members are working class individuals with limited financial resources, absorbing loss causes a severe financial shock.

A loss experienced by informal savings groups can be devastating to each contributing member as these funds represent their savings and minimal disposable incomes. This is a defining and critical factor with regards to stokvel lending – most members are generally risk averse with their savings and disposable income, and perceive loans to relatively unknown individuals as highly risky. Non-repayment of loans undermines the viability of stokvels (Matuku & Kaseke 2014).

3.3.6. Recourse

Recourse in the case of a default within a stokvel is limited to actions outside the sphere of influence of regulations such as the NCA. This is an informal credit agreement, and protection for the lender and borrower is not provided for under the NCA. However, the informal recourse for default within a stokvel is effective. The stokvel can expel a non-performing member and effectively attach an unwanted social stigma to that person. This recourse comes from within the community in which the borrower lives, and is effective in stemming defaults. In the study conducted by Matuku & Kaseke (2014), participants indicated that their constitution is endorsed by the police and that when outside borrowers refuse to bring back the money, they invite the police to intervene.

Informal recourse may be more of a deterrent to defaulting on a credit agreement than formal recourse, seemingly because of the public nature of the recourse. A stokvel member interviewed by Matuku & Kaseke (2014) was quoted as saying: "When you refuse to pay, we come to your house; we write down how you agree to pay us, then you will sign and we will take it to the police who will put a stamp on the agreement. If you fail to pay, then we will come and get something from your house, like a fridge or anything, and we will sell it to get our money back and the police will know about this."

3.3.7. Access to further credit

Access to further credit is severely hampered within the informal market if a borrower has already defaulted. The social knowledge of the defaulter is well known, and no other informal lenders or stokvel members would provide further credit to that borrower. Even if this member repaid their debts, they would only be eligible for credit once trust was regained. The borrower would have to turn to more expensive or formal sources of credit. Lack of trust and dishonesty hinder the success and optimal functioning of stokvels (Matuku & Kaseke 2014).

3.4. Stokvel themes

In prominent literature on stokvels, namely Mashigo and Schoeman (2011), Murdoch (1999), Oosthuisen (2002), Lukehele (1990) and Verhoef and Schulze (1996) to name a few, there are four themes that emerge as key differentiators of stokvel credit: behavioural underwriting, peer pressure, fairer costs and disintermediation.

3.4.1. Behavioural underwriting

The first element in stokvels that is not readily present in traditional lending processes is behavioural underwriting, which uses an individual's historical behaviour (financial and non-financial), interactions and activity as indications of risk of default. It involves incorporating behaviour into the risk-return relationship.

Behavioural underwriting is already being widely applied in the motor underwriting sector, where, for example, female drivers get better rates because they are considered to be safer drivers. In the future, technology will make it possible to underwrite for specific individuals rather than groups (Guardrisk 2010). The credit paradox can be solved by granting credit only when the borrower has easy means of enforcing his contract or the lender has personal knowledge of the character of the borrower (Akerlof 1970). Sir Malcolm Darling (1947) said of village moneylenders: 'With his intimate knowledge of those around him he is able, without serious risk, to finance those who would otherwise get no loan at all.'

In a stokvel, the minimum requirements to qualify for a loan can include a minimum membership period in the stokvel, a consideration of the number and consistency of contributions, the size of the loan relative to the amounts contributed, and the borrower's standing in the community/stokvel. These are essentially behavioural traits that qualify an individual for a loan from the stokvel's pool of funds.

The stokvel does not perform any credit-vetting process at credit bureaus as an intimate knowledge of the borrower is obtained before the lending application

process begins. The stokvel members know the borrower's children, family and friends, they know where the borrower works and lives, and they know the behaviour of the borrower. The development of social capital is one of the benefits of participating in a stokvel. As members participate in stokvels, they establish social networks and friendships (Matuku & Kaseke 2014).

Before the loan is granted by the stokvel – perhaps even before the borrower applies for a loan – other members have already priced the risk associated with a borrower's behaviour. Reputations of members are acquired on the basis of individual behaviour that is observed by others (Mashigo & Schoeman 2010). All knowledge – personal, social, economic, past and present – available and stored by different informal mechanisms in the stokvel completes information on the individual member and creates preference and motive for a specific outcome that makes individual decisions and outcomes unambiguous and predictable (Mashigo & Schoeman 2010).

3.4.2. Peer pressure

The second element not readily present in traditional lending processes is peer pressure – the influence a peer group employs that inspires others to perform or behave as the group expects or requires. Basically, peer pressure is what causes people to do things to fit in (Feller 1993).

The peer pressure exerted within a stokvel is significant. If an individual does not contribute as required, they let down the rest of the group. To belong to the stokvel and social group, performance as per the agreed contribution is required and expected.

When members borrow from a stokvel, the peer pressure to repay/perform is considerable. Stokvels do not rely on collateral to guarantee loans, but rather on social pressure and monitoring (Jones *et al.* 2000). Because of the loss in terms of personal relationships, trust, loyalty and reputation of members, violation of the rules does not normally happen (Mashigo & Schoeman 2010). The borrower's loan

comes from other stokvel members' money. If the borrower does not repay the loan taken from the stokvel, a social stigma is attached to that member. The lenders and borrowers are intimately aware of one another's actions and behaviours – if a borrower does not repay the loan, the stokvel and the community are acutely aware of the default (Jones *et al.* 2000).

The success of the stokvel and its members depends on the performance of members, either in contributions or repayments. Members have vested interest in the repayment of other members' loans, and peer pressure exists to guarantee repayment of the loan. The actions of one member have a bearing on others and influence the viability of the informal financial operations (Mashigo & Schoeman 2010). Social practices and conventions in a group homogenise and create certainty about future prospects: the behaviour of the individuals contracted to the group's practices, conventions and prospects are insured by liability and loyalty to the group (Mashigo & Schoeman 2010). Due to their role as a social ordering mechanism, groups can create an environment in which the individual can avert risk and irreducible uncertainty by pooling liability and possible loss in a collective way (Mashigo & Schoeman 2010).

Formal credit providers do not have this same peer pressure and community involvement when the credit agreement is reneged upon. Formal credit is provided through an individual agreement between the borrower and the credit institution. Should the borrower default, their community would not automatically be aware of the non-payment.

Peer pressure within stokvels significantly reduces moral hazard; if a member has the financial resources, they will invariably repay the loan. Consider the social reality in the context of a microfinance programme presented to villages: they consciously regard fulfilling important obligations to particular people as the very definition of behaving morally (Oxfeld 2011).

3.4.3. Fairer costs

Credit from a stokvel carries a lower cost when compared with formal credit provision because of two factors: incentive or motive and overhead costs.

Stokvels are an example of mutual aid arrangements designed to provide mutual assistance to the members (Matuku & Kaseke 2014). Pooling funds creates a safety net that could provide the means for economic survival during times of crisis. Stokvels play an important role as economic and social instruments in smoothing consumption, and in improving the living standards and increasing the utility of poor households (Mashigo & Schoeman 2010). The primary objective of a stokvel is to promote the financial welfare of its members. It is not driven by motives of profit, but functions to assist members to access financial resources. Stokvels earn a return on funds lent out, but it is less than what formal lenders earn.

Stokvels do not have costly overheads like formal lenders, which pay costs such as salaries, operating systems and rentals. These costs need to be paid monthly, and are incorporated into the cost of the loan. As a result, stokvels are able to price loans at marginal rates. Many stokvels operate as credit associations where people can borrow money at affordable interest rates (Matuku & Kaseke 2014).

A stokvel's ability to mobilise savings and channel small loans to small borrowers in an efficient and equitable way reduces transaction costs (Mashigo & Schoeman 2010). The higher the burden of repayment, the higher the chances of a borrower not being able to repay their loan.

3.4.4. Disintermediation

In developed and developing countries there are observed gaps in financial infrastructure and the presence of imperfect information problems (Pederson 2004). This creates efficiency problems that disintermediation aims to overcome. Disintermediation is a term that refers to the removal of "the middle man" or the intermediaries typically involved in a commercial transaction (Rutenbeck 2012).

Traditional distribution channels, such as distributors, wholesalers and retailers, add to the final cost for the end consumer. But companies can now deal with every customer directly, for example via the internet (Kauffman 1999).

Disintermediation in the loan process means cutting out the credit provider. Formal credit providers raise funds through channels such as investors, hedge funds and private equity to provide loans to individuals. The credit provider is required to pay investors a minimum return on the funds invested into the credit providers' loan book. This minimum return is the total cost paid by borrowers plus the margin earned by the credit provider. Essentially, the credit provider is the intermediary between large funders and the borrower.

In stokvels, even though the funders are the members and the borrowers, there is direct interaction between the two roles. The disintermediation of a credit provider is integral to lowering the cost of credit. A stokvel is by its nature a homogeneous, decentralised utility that caters for (insures) the specific motives and needs of its members by insuring prospects that would otherwise directly affect their consumption (Johnson & Rogaly 1997).

Disintermediation brings funders and lenders closer, establishing a firmer relationship between the two, thereby making their credit agreements more personal and perhaps more difficult to disengage during difficult times.

3.5. Stokvel caveats

Having discussed the advantages of stokvels with regards to credit and savings mobilisations, it is necessary also to highlight a few caveats.

The major shortcomings of stokvels with respect to this study are its:

- mobilisation potential;
- scalability; and
- unregulated nature.

3.5.1. Mobilising potential

Although stokvels mobilise savings from a group of individuals within a community for a particular purpose, they may lack the potential to mobilise enough member contributions to on-lend in a meaningful manner. According to African Response's 2012 research, the majority of stokvel members fall into LSMs 5 and 6, and more than 50% of those members earn less than R5 000 a month. This raises the question of whether poorer communities will be able to mobilise enough savings to lend to their own stokvel members to satisfy their needs.

Generally, stokvel membership is drawn from people who live in the same geographical space (Matuku & Kaseke 2014). This severely restricts poorer communities from providing credit to their members to improve their lives. In fact, there is a possibility that smaller amounts of credit – the most the group can afford – could have a negative impact on borrowers because of the restrained use of those amounts resulting in consumption purchase. A borrower who has access to only R3 000 as opposed to R30 000 would probably use smaller amount to purchase consumable goods instead of spending it on development.

Stokvels that are able to provide enough credit to satisfy the developmental purchases of its members contribute positively to the welfare of its members more than those that are able to provide only smaller loan amounts.

3.5.2. Scalability

The geographic limitations of stokvel groups tend to hamper their scalability in the number of members the group admits. Scalability may come in the form of:

- communities being sparsely populated over a wide area;
- prohibitive physical distances to travel to regular meetings;
- limited use of technology;
- inadequate security of funds; and
- limited members and funds within the community.

These factors restrict the stokvel from growing at a pace higher than the prosperity of its geographical location, and magnify exposure of the stokvel to macroeconomic shocks such as commodity price fluctuations, poverty levels, droughts, employment levels, infrastructure access and technology trends, to name a few. For instance, if the community is reliant on the local mining industry and commodity prices slump, causing job losses or a mine closure, the community and stokvel are severely affected. Or if the community is dependent on farming and a drought strikes, output is affected, job losses occur and the stokvel suffers.

The scalability of stokvels is a notable drawback. A solution to this is the diversification of its member base, but this leads to the erosion of other benefits such as behavioural underwriting, implicit trust and peer pressure.

3.5.3. The unregulated nature

The unregulated nature of stokvels means that savers and borrowers have little or no legal or formal recourse against one another in the case of non-performance. The unregulated nature of stokvels results in social contracts or mutual support being formed instead of formal ones, as seen in the study by Matuku and Kaseke (2014). The recourse against non-performance falls outside the ambit of acts such as the NCA or South African contract law. This recourse can include anything from violence to being ostracised by the community.

The unregulated nature of stokvels could see savers losing some or all of their savings because of default by a borrower. Without recourse, savers could be devastated by the loss of their savings, and this will most likely be felt by their immediate families and communities in varying degrees. This is why trust, loyalty and honesty are valued in stokvels (Matuku & Kaseke 2014).

3.6. Formal and informal lending comparisons in South Africa

Compared to formal financial services, informal financial services generally incur lower transaction costs, require less documentation, no proof of employment or

residence and no traditional collateral to secure loans (Mashigo & Schoeman 2010). They also possess a high degree of information about the borrower (Mashigo & Schoeman 2010). One of the main differences between the formal and informal lending is found in the degree of separation between participants. This relates to the theory of the six degrees of separation – that everyone in the world is separated from everyone else by six links (Berman 2006). Stated differently, anyone anywhere in the world can be introduced to anyone anywhere in the world through six or fewer friends. This theory was originally conceptualised in 1929 by Frigyes Karinthy.

The higher the degree of separation between individuals in a loan agreement, the higher the degree of abstraction and vagueness there is in the information used to make lending decisions. Stokvels have a lower degree of separation than traditional lenders. Participants, who know one another intimately, have a deeper data set when compared with participants who meet through a loan-application process.

The degree of separation affects the type of information lenders and borrowers have about one another. The closer participants are, the more information they can gather through behaviour, reputation, lifestyle and social groupings. This soft information added to hard sources of information, such as credit scores, defaults and judgement, gives the lender substantial insight about the borrower. The further away participants are from one another, the vaguer and more abstract that information becomes. There is a tendency to rely only on hard information sources to assess risk in traditional unsecured lenders. Risk is introduced into the lending process in three ways. Firstly, the lender's access to granular behavioural data for underwriting is hampered in formal lending when compared with stokvels, increasing the risk of adverse selection.

Secondly, in formal lending, the borrower may experience less peer pressure from a lender outside their immediate social or community group. Borrowers may be more likely to deal with a moral hazard dilemma if they receive a loan from their

stokvel. The risk of moral hazard increases as the degree of separation increases between lenders and borrowers.

Thirdly, the higher the real or perceived risk, the higher the cost of the transaction. The increased interest rates and associated charges compensate the lender for the additional risk of the borrower. The cost of the transaction is borne by the borrower – the higher the costs, the higher the repayment burden on the borrower. This may lead to higher default rates.

3.7. Link to problem statement

The degree of information members have about one another, peer pressure and monitoring are found to be effective ways of reducing information and monitoring costs, thereby reducing the problem of moral hazard and adverse selection (Murdoch 1999). There are valuable lessons to be learnt and incorporated from stokvel lending into formal unsecured lending. These advantages and shortcomings could contribute to a sustainable alternative to traditional unsecured lending.

Peer-to-peer lending may address a number of the shortcomings of formal and informal unsecured lending by allowing lenders and borrowers to curate their transactions on their own, leading to a more sustainable market.

3.8. Conclusion

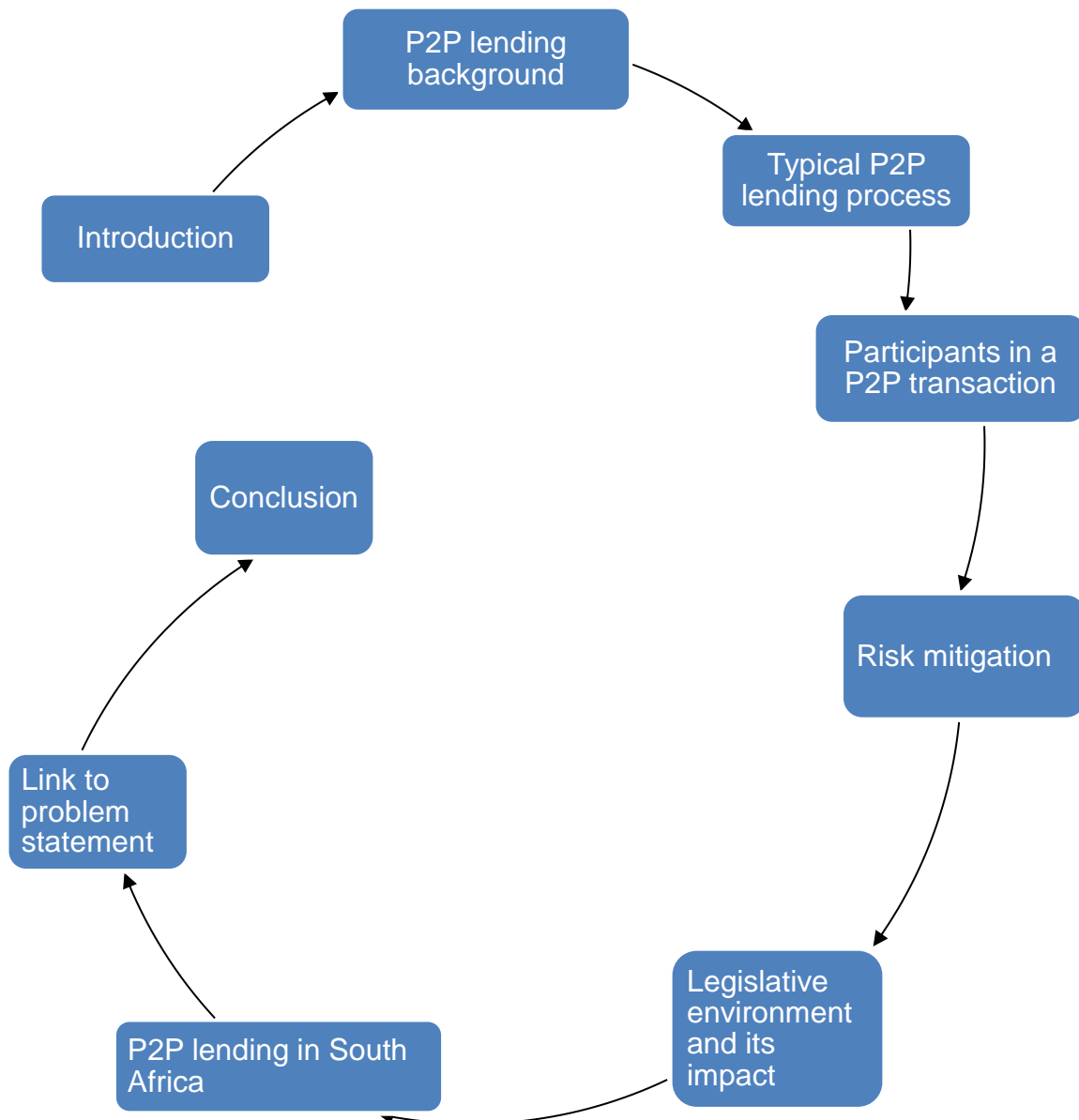
This chapter reveals thought-provoking themes from the informal lending sector, particularly stokvels, that shed light on possible attributes of a sustainable alternative to unsecured lending. Of particular interest are the concepts and application of behavioural underwriting, peer pressure, fairer costs and disintermediation. All have significant advantages but contain notable drawbacks such as mobilising potential, scalability and difficulties in regulation.

Possibly the most interesting link is between degrees of separation and sustainable lending. The higher the degree of separation between individuals in a

loan transaction, the more abstract the lending information is. The closer participants are to one another, the more information they can gather through behaviour, reputation, lifestyle and social groupings – granular behavioural underwriting. Stokvels have a lower degree of separation than traditional lenders, which allows for better credit decisions.

Chapter 4 builds on the advantages of formal and informal lending, and attempts to answer the shortcomings of both approaches through a view of P2P lending, which introduces lenders and borrowers to facilitate a credit transaction between them directly, thereby disintermediating credit transactions through an online platform. The next chapter aims to delve into P2P lending, its participants, and the risks and legislation involved with these transactions, and then provide a link to the problem statement of this study.

Chapter 4: Peer-to-peer lending in South Africa



4.1. Introduction

This chapter aims to investigate P2P lending from a theoretical view in South Africa.

It is divided into two sections:

1. An introduction and background to the participants and processes in P2P lending.
2. A comparison between South Africa's informal P2P market and formal P2P lending markets globally.

4.2. Peer-to-peer lending background

The growing interest in working for the common good is manifested not only in corporate social responsibility initiatives, but also in the emergence of new organisations and social ventures specialising in running projects among less privileged groups of people, thus responding to social problems and injustices (Haynes 2012; Felicio *et al.* 2013; Sud *et al.* 2009). The creation of social value has been a central point of interest in research on social entrepreneurship and has been defined as both a pre-conditional purpose and an outcome of it (Mort *et al.* 2003). Social value creation through social venture establishment refers to the production of offerings and their outcomes that advance justice, fairness and welfare in a given human community (Austin *et al.* 2006). This social value usually includes social inclusion. According to Omidvar and Richmond (2003), the overall aim of social inclusion is to close the physical, social and economic distances separating people, rather than only to remove the barriers existing between different groups. This social inclusion is the essence of P2P lending.

Peer-to-peer lending – also referred to as person-to-person lending – allows savers (lenders) to lend money to individuals and businesses that need loans but do not have access to funds from other sources (King & Carey 2013). Peer-to-peer lending is usually arranged through websites that harness the power of the internet to match up savers and borrowers (King & Carey 2013).

The development of the P2P market niche was boosted by the global economic crisis that started in 2007, when P2P lending platforms promised credit at a time when banks and other traditional financial institutions experienced fiscal difficulties (Laemmermann 2012). As traditional lenders instituted stricter lending controls, American and British consumers were forced to look elsewhere to satisfy their credit needs. Individuals began to revert to the antiquated practice of directly lending to and borrowing from one another.

Before today's traditional banking institutions, individuals lent to and borrowed from one another without making use of financial intermediaries. Until the 3rd century AD, all banking-like activities were conducted in private, and almost all moneylenders were private individuals. Anybody who had any additional capital and wished to lend it out could easily do so (Zgur 2007). This practice was mostly localised and functioned within communities or neighbourhoods.

Today, individuals are again embracing this practice of directly lending to and borrowing from one another. Modern P2P lending and borrowing is a new twist on an old way of lending and borrowing money (Arnold & Harzog 2009). The only difference being that today individuals use the internet to connect with one another, which negates the limitation of localised restrictions on lending and borrowing.

The main characteristics of online P2P lending are disintermediation and reliance on existing social networks (Laemmermann 2012). Disintermediation is achieved by introducing lenders and borrowers directly to one another via an online P2P lending platform. Reliance on social networks includes using the people within one's social grouping as sources of funds or investments. However, internet-based P2P lending is still intermediated through an online platform or the P2P intermediary. Peer-to-peer lending platforms comprise online sites where borrowers request loans and private lenders bid to fund these in an auction-like process (Klafft 2008). This modern form of P2P lending represents a realistic alternative for individuals to lend to and borrow from one another.

This type of lending and borrowing does not only extend to individuals – the internet has led to forms of disintermediation in a number of sectors, both in business-to-business markets as well as in business-to-consumer markets (Gereffi 2001). Most P2P loans are unsecured personal loans made to an individual and/or business (King & Carey 2013). Other forms of P2P lending include student loans, commercial and property loans, payday loans and secured business loans, leasing and factoring (Moenninghoff 2012).

Social lending offers borrowers the opportunity to obtain loans at lower interest rates and costs, while offering lenders the opportunity for investments with higher rates of return than they would get from banks or other common alternatives (Lambert *et al.* 2013).

It also represents a fundamental disintermediation of loan contracting that allows investors to deal directly with borrowers (though still on an online P2P platform) without incurring costly monitoring responsibilities (Everett 2010).

4.2.1. General mechanics of peer-to-peer lending

The general idea around P2P lending is contained in the flow chart below.



Figure 4.1 Proposed interface of the platform for a P2P transaction

Source: (Own compilation)

Peer-to-peer lending occurs directly between individuals or peers without the intermediation of a traditional financial institution (Laemmermann 2012). Peer-to-peer lending platforms enable lenders to earn a higher rate of interest than they would using a cash deposit account. (The terms “P2P platform” and “P2P intermediary” are used interchangeably as their meaning is considered to be the

same.) Borrowers have comparatively easy access to funds at reasonable interest rates, and potentially pay a lower rate than what they would have had they taken a loan from a traditional bank (King & Carey 2013). Typically, interest rates on P2P loans are lower than the interest rates charged on loans by banking institutions.

4.2.2. The start of peer-to-peer lending

Since 2005, P2P lending has grown immensely and is now considered a multibillion-dollar industry. Christine Farnish, of the British firm Peer 2 Peer Finance Association, says the P2P lending industry is growing at about 250% a year, while a study by British charity Nesta suggests the sector has the potential to account for £12.3 billion (about R2.8 trillion) in loans a year in Britain alone.

Peer-to-peer lending started in Britain in 2005 with a lending platform named Zopa, and a year later, Prosper established itself as the first American P2P lending platform (Laemmermann 2012). An American-based P2P lender called Lending Club lent its billionth dollar in November 2012, and its second billionth dollar less than nine months later in July 2013 (Salmon 2013). In 2009, the American non-profit Zidisha became the first P2P platform to link lenders and borrowers across international borders without using local intermediaries (Laemmermann 2012).

Further, P2P lending attracts borrowers who do not qualify for traditional bank loans because of their credit history or lack thereof (Laemmermann 2012). Peer-to-peer platforms are becoming a serious alternative to obtaining convenient, cheaper and faster forms of credit (Noonan & Arnold 2015). This form of lending and borrowing is also being bolstered by large investments from nonfinancial institutions. Lending Club, for example, announced in May 2013 that Google and Foundation Capital had bought \$125 million (about R1.9 billion) of the firm's shares (Campbell & Levy 2013). This is a significant investment from Google, a Fortune 500 company. Google representatives were quoted as saying that they were betting on a less hierarchical future for the credit industry (Campbell & Levy 2013). Backing up this claim, Lending Club aims to undergo a public listing in the next few years.

4.2.3. The case of Lending Club

Lending Club is the world’s largest online marketplace connecting borrowers and investors (Lending Club 2015). The figures below show the basic value proposition for both lenders and borrowers utilising the Lending Club platform.

1. Borrowers: Lending Club reveals that borrowers who accessed a personal loan via Lending Club to consolidate debt or pay off high-interest credit cards report that the interest rate on their Lending Club loan was an average of 30% lower than what they were paying on their outstanding debt or credit cards (Lending Club 2015).
2. Lenders: Lenders are encouraged to lend via Lending Club’s platform as they earn adjusted net annualised returns of between 7.71% and 24.63%, as displayed in Figure 4.2, which shows the reward-versus-risk relationship (Lending Club 2015).

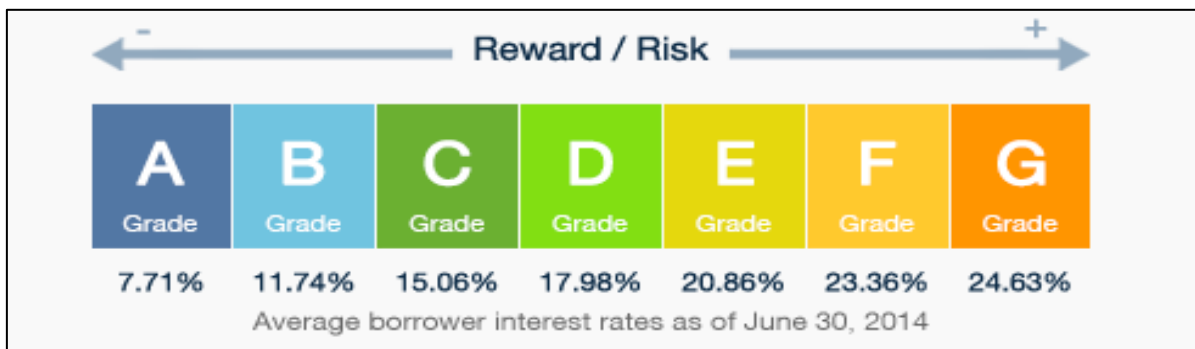


Figure 4.2 Lending Club’s reward-versus-risk relationship for lenders

Source: Lendingclub.com 2015

Grade A risk category is the lowest borrower risk profile with the smallest return. Grade G risk category is the highest borrower risk profile with the highest returns.

Further statistics provided by Lending Club show that the total amount of loans facilitated through the platform had reached more than \$11.1 billion (about R1.7 trillion).

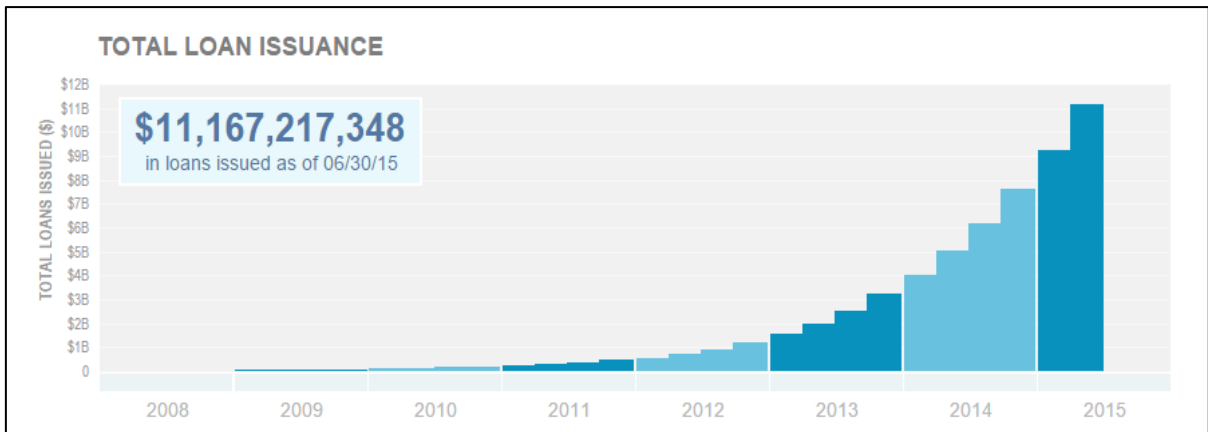


Figure 4.3 Lending Club’s total loan issuance since 2007

Source: Lendingclub.com 2015

In the second quarter of 2015, 157 039 loans were issued, and the value of total quarterly loans issued rose above \$1.9 billion (about R29 billion), as shown in Figure 4.4.

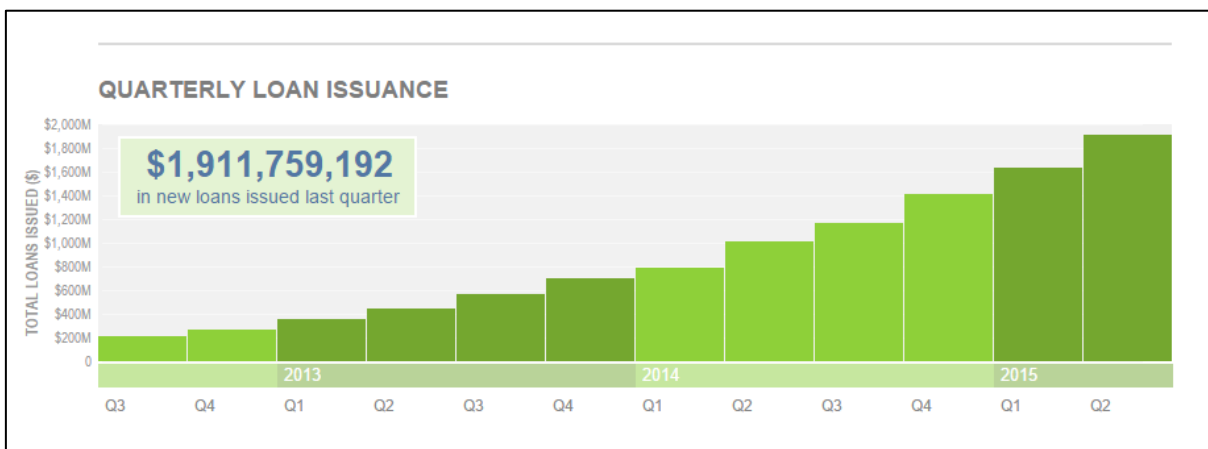


Figure 4.4 Lending Club’s quarterly loan issuance

Source: Lendingclub.com, 2015

Lending Club has experienced significant growth in its number of loans issued as well as the total value of its loans since inception. The company also released statistics on what borrowers spend their money on. Figure 4.5. shows the two largest uses as refinancing debts (51.9%) and paying off credit cards (18.5%).

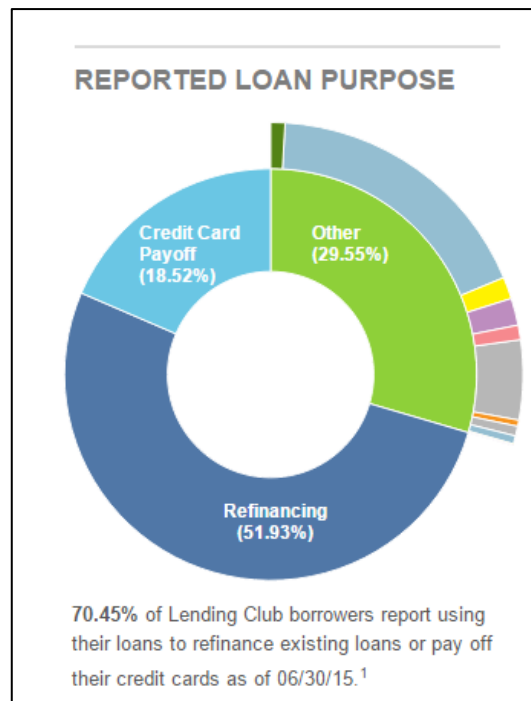


Figure 4.5 Lending Club’s reported loan purpose
 Source: Lendingclub.com 2015

4.3. Typical peer-to-peer lending process

An overview of a generic P2P lending process will act as the foundation for the proceeding discussion and analysis on the elements that comprise the P2P transaction and environment. A generic P2P lending process typically follows these stages:

1. An online marketplace is provided as a platform to facilitate interaction between lenders and borrowers.
2. Lenders are attracted to the platform by the opportunity to earn higher returns on their savings than what they would have when placing the same money into other available fixed interest rate bank offerings (Campbell & Levy 2013).
3. The P2P platform assesses lenders to make sure there is compliance with specific country legislation such as the Financial Intelligence Centre Act,

2001 (Act No. 38 of 2001) and regulations to prevent money laundering. Lenders are then required to transfer the amount they wish to invest into a trust account managed by the P2P platform. This amount is credited to the lender's P2P account to be allocated by the lender to borrowers. Only once a lender has money in the P2P trust account may they begin lending to borrowers.

4. Borrowers are attracted to the platform by the opportunity to pay less interest and fees on loans. In effect, this is an opportunity to save on the interest charges of their debt (Lending Club 2015)
5. The P2P platform assesses borrowers by checking their credit histories, credit scores, affordability, and by screening their internal credit scorecards. This information is collated and a risk weighting is assigned to individual borrowers. This risk score is visible to lenders and guides them in pricing their loans to the borrower. The price of a loan is negotiated through a process similar to an auction, where lenders bid the amount they are willing to lend and at what price given the borrower's risk grade. Borrowers then have the opportunity to select the lenders who offer the best rates. The weighted average interest rate is calculated, and this becomes the ruling interest rate for the loan.
6. Once a borrower's loan has been fully funded or subscribed, there is a contracting phase in which agreements are put in place. All lenders who have chosen to participate in the loan, the borrower and platform are parties to the credit agreement.
7. Loans are disbursed from the managed trust account by the P2P platform to the borrower's bank account.
8. Repayments from the borrower to the P2P platform via the managed trust account begin. This stage also includes monitoring by the P2P platform. The P2P platform credits the lenders' P2P accounts, and they can withdraw their earnings or reinvest them in further loans. Once a borrower begins to

repay a loan, the borrower is classified as either performing or non-performing.

- Performing loans: performing loans and debt securities that are not past-due and without risk of non-repayment and performing off-balance sheet items (Haben 2015).
- Non-performing loans: past due more than 90 days and / or unlikely to pay (Haben 2015). The loss is ultimately borne by the lender.

The last stage is where value for the lender and platform is either created or destroyed. Performing loans increase the probability of further investment into loans by lenders via the platform.

4.4. Participants in a peer-to-peer transaction

What follows is a generic description of the main participants in a P2P transaction, and their interactions and links.

4.4.1. Lenders

Lenders in a P2P transaction vet the various borrowers by utilising the data provided by the platform on borrowers' creditworthiness, and establish the lowest rate at which they would be prepared to fund the loan (Snyder 2011). The lending rate is a reflection of the perceived risk (the risk of default and loss of capital) of the borrower by the lender. If the borrower defaults and cannot pay back the loan, the bad debt is held solely by the lender, which is why lenders like to spread their risk; they are often only willing to fund part of a loan, which means many loans will have multiple lenders (Snyder 2011).

The risk-and-return relationship is managed through the dissemination of information between the lender and borrower. Traditionally, banks have played a dominant role in allocating credit, partly because they are perceived to have the financial expertise to evaluate borrowers and effectively intermediate capital

(Diamond 1984). However, Iyer *et al* (2009) suggest that lenders in the P2P market infer information about borrowers from two sources: hard and soft information. Hard information is credit scoring, judgements and repayment history, whereas soft information is any additional information given to the lender by the borrower such as their use of funds, explanations for negative credit histories and personal backgrounds.

Research shows that lenders on P2P platforms are able to partly infer borrowers' creditworthiness using the rich information set that these markets provide (Iyer *et al.* 2009). Moreover, although lenders in these markets mostly rely on standard banking variables to make inferences on creditworthiness, they also use non-standard or soft sources of information in their screening process, especially in the lower credit categories (Iyer *et al.* 2009). This is important for risk management and loan pricing.

Central to a P2P transaction is the dissemination of information, which creates the opportunity for disintermediation. The P2P platform is often referred to the a marketplace lending model (PwC 2015). The P2P platform creates a marketplace for lenders and borrowers to meet, exchange information and transact. The exchange of information is critical as it alleviates the need for a traditional financial intermediary.

Peer-to-peer platforms develop internet platforms that connect borrowers with investors (PwC 2015). The information exchange between lenders and borrowers allows lenders to manage their risk. Lenders can theoretically decrease the chance of adverse selection when making a lending decision in two ways. Firstly, the lender may choose to lend only to borrowers who are classified as low risk – those who fall into the Grade A category in Figure 4.2. Secondly, lenders may reduce their risk of default and adverse selection by diversifying their investments across a number of loans. Peer-to-peer lending sites allow lenders to influence the riskiness of the loans they wish to make and divide the loan amount among a number of borrowers (King & Carey 2013). Lenders may offer small amounts to a large number of borrowers to reduce their risk of default, for example, splitting a

loan investment of R1 000 into 10 smaller loan contributions of R100 each. This diversifies the lender's risk of default across 10 borrowers as opposed to lending R1 000 to a single borrower. This is effectively a group-lending decision from the lender's perspective. Fahr and Irlenbusch (2011) find that groups make fewer mistakes in an information cascade experiment than individuals, and thus earn more money. Research on group decision-making show that groups are more likely to make choices that follow standard game-theoretic prediction, while individuals are more likely to be influenced by biases, cognitive limitation and social consideration (Charness & Sutler 2012). Group decision-making may be a method for individuals to try protect themselves from the consequences of their own behaviour irrationalities or limitations (Charness & Sutler 2012). Group membership can facilitate people doing things that they wish to do, but might be unable to do without the support of a group (Charness & Sutler 2012), for example bulk or group buying groups.

Lenders also face the potential risk that a qualified borrower chooses not to repay their loan (moral hazard). On a P2P platform, the borrower is required to divulge wide-ranging information, both financial and non-financial, to lenders (PwC 2015). This exchange of information creates an online community where there is engagement and conversation between lenders and borrowers. There is an understanding – a connection – between the lender and borrower that is very different from the managed relationship between a consumer and a corporation.

During the lender and borrower engagement, the lender determines if they would lend to the borrower and at what rate. The borrower has an opportunity to accept or decline the offered rate. There is an element of price competition present, as multiple lenders and borrowers jostle for the market. Price discrimination escalates with increased market competition (Peoples 2012). The higher the competition between lenders to fund a borrower's loan, the lower the rate charged by lenders or chosen by borrowers.

4.4.2. Borrowers

Borrowers (as defined in section 2.2) aim to secure funding from lenders via the P2P platform and repay the money according to a predefined repayment schedule. Borrowers are attracted to P2P loans because of lower interest rates (Molineux 2012). Peer-to-peer interest rates are typically lower than those of credit cards for most borrowers (PwC 2015).

When listing a loan request, borrowers provide a combination of hard and soft information associated with their loan request. The hard information – typically public information – is easily verifiable by the P2P platform, and includes employment status, income level, age, identification number, balance sheet data, rating and scoring (Godbillon-Camus & Godlewski 2006).

Soft information includes personal backgrounds and supporting information. Borrowers also include information relating to the use of the P2P loan (Crowdfunding Network 2015). Soft information is typically internal – the lender and borrower form a kind of relationship and with it form judgements and opinions (Godbillon-Camus & Godlewski 2006).

Peer-to-peer platforms usually stipulate the minimum level of information that is required to post a loan request. This includes detailed personal information such as a person's identification number, salary, employment status, employer, amount requested, interest rate acceptable and loan duration.

Borrowers can then choose how much more information they wish to divulge. They can provide detailed information such as their personal history, reasons for the loan, a detailed budget and an action plan for paying off the loan (Herzenstein 2008). They may also upload pictures of themselves, their family and other information that is similar to how social networks function. Borrowers may even explain the negative aspects of their profile, such as a low credit grade or past delinquencies (Herzenstein 2008).

The hard and soft information presented by the borrower influences the decision-making of the lender. The more information a borrower provides, the more information collateral is presented to the lender, the more comfortable a lender is in making their lending decision. Peer-to-peer platforms incorporate a wide range of data elements and move beyond traditional credit scores (PwC 2015).

Borrowers are attracted to P2P platforms for one of three reasons. Firstly, borrowers turn to P2P platforms because they have been excluded from traditional financial institutions because of previous defaults or poor credit histories (Laemmermann 2012). This is an incentive with negative consequences for lenders as high-risk borrowers tendering for funds on P2P platforms carry a high probability of default. The riskier the borrower appears, the higher the rate of interest that will be charged (King & Carey 2013).

Secondly, borrowers would opt for credit via a P2P platform primarily to save costs on their loans. Generally, the cost of a loan through a P2P platform is lower than through a financial intermediary. This is a positive financial incentive for both investors (lenders) and borrowers to use a P2P platform (Molineux 2012).

Thirdly, there is an emerging anti-institutional trend among consumers who no longer want to enter into agreements with traditional financial institutions. This sentiment emerged from the mistrust garnered by large corporates for their actions prior to and during the 2008/2009 financial crisis, including the required use of taxpayers' money to bail out private corporations. Now, 15% of retail lending is going to players other than banks, and this could rise to 20% in the next two years (Gardner 2011).

The cost of credit is a noteworthy incentive for borrowers using P2P platforms. Theoretically, P2P platforms do not have the overheads and funding issues traditional financial institutions have. The additional costs a traditional financial services company incurs are added to the total cost of the credit paid by borrowers.

It is interesting to note that the cost of credit on most P2P platforms is quoted in terms of annual percentage rate (APR). This refers to the annual rate that is charged for borrowing, expressed as a single percentage that represents the actual yearly cost of funds over the term of a loan (Timmons *et al.* 2013). This includes any fees or additional costs associated with the transaction.

As mentioned earlier, according to the 2012 report by Deloitte Touche Tohmatsu Limited, the APR approach has already been adopted by the United States, the European Union and the United Kingdom. An APR represents the total cost of borrowing, which includes not only the interest but also other charges and fees the credit provider requires the borrower to pay, including credit insurance. This enables borrowers to compare different lenders' offerings directly (Deloitte Touche Tohmatsu Limited 2012).

In South Africa, the APR approach has not been adopted by credit providers. Borrowers therefore do not have a single percentage reference point to compare the cost of credit across credit products. Adopting an APR approach to quoting loans provides greater transparency to borrowers across the term of the loan. A summary of the benefits and challenges of the APR approach is detailed in Figure 4.6.

The benefits and challenges of Annual Percentage Rates	
<p>Benefits</p> <ul style="list-style-type: none"> • Consumers are able to directly compare different unsecured lenders' offerings. • The total cost of borrowing is quoted in a single rate. • Can be used to show the relative impact of different payment forms (such as balloon payments or bi-weekly payments instead of straight monthly payments). 	<p>Challenges</p> <ul style="list-style-type: none"> • Rates often do not include late payment penalties or other fees such as loan initiation fees. • Is dependent on the time period of the loan and therefore a 3 year loan cannot be benchmarked against a 5 year loan. • Many regulators find it difficult to define which one-time fees must be included and which excluded from the calculation. This allows lenders the ability to determine which fees will be included (or not) in the calculation. • Since the principal loan balance is not paid down during the interest-only term, the total interest paid over the lifetime of the loan is increased and the APR is higher than a loan without an interest-only payment period.

Figure 4.6. The benefits and challenges of annual percentage rates

Source: Deloitte Touche Tohmatsu Limited 2012

Peer-to-peer platforms use the APR measure in their auction processes (Dobrolioubov 2014). Borrowers on a P2P platform essentially bid for credit from a number of lenders who offer varying amounts to different borrowers based on their risk appetite and investment strategy. Peer-to-peer platforms also provide automatic matching of lenders to borrowers based on risk profiles (PwC 2015). Lenders usually split their investment over a number of borrowers to reduce the risk of default, and borrowers usually need to attract a number of lenders to get the full amount they require.

The APRs range from about 7% to 36% (see Figure 4.2), and loan terms are generally for either three or five years (Dobrolioubov 2014). The ruling weighted average APR is the final cost of credit for the borrower.

Once a loan has been fully subscribed by lenders, the APR is agreed upon and contracts are concluded, and the P2P platform disburses the funds to the borrower. At this stage, the borrower begins to repay the loan to the P2P platform, which in turn allocates the monthly repayments proportionally to the lenders.

Lenders who have selected borrowers through vigorous risk-mitigation techniques decrease the probability of adverse selection yet still face the risk of moral hazard. If a borrower defaults on their loan, the lender takes full responsibility, resulting in financial loss. Borrowers on P2P platforms face greater peer pressure from the online community than if they borrowed from a financial institution (Cognizant 2014). Lenders and borrowers form a relationship when transacting on a P2P platform. Peer pressure and a sense of belonging to a group can reduce the chances of default (Cognizant 2014). Borrowers are also subjected to an online community rating system that not only determines their access to future P2P loans, but also provides a trust rating. This trust rating is inherent in stokvels in South Africa, where trust between members is paramount and is connected to community acceptance and value.

4.4.3. Peer-to-peer lending platform and intermediary

The P2P lending platform that connects lenders and borrowers is essentially an online marketplace for loan transactions (Cognizant 2014). The platform provides a two-way communication portal for both lenders and borrowers that allows information to flow between participants via instant messaging, profile information, credit-scoring figures and social networks. There is an increase in the importance of “new economy” or two-sided platforms/intermediaries that connect buyers and sellers and provide a matching price discovery, certification, advertising and other informational services, usually without assuming complete control over the transaction (Hagin & Jullien 2007).

Peer-to-peer platforms have radically changed how businesses and consumers act, interact, buy, sell and provide financial services over the internet (Cognizant 2014). The utility for an agent in one group that participates is dependent on the number of participating agents in another group in the same platform (Zhang & Liu 2015). The online marketplace is suitable for lenders and borrowers who have consistent and widespread internet access, which poses accessibility challenges for developing countries. In South Africa and other developing countries, access to the internet through a laptop, desktop or tablet is predominantly restricted to middle- to upper-income groups, and access for lower-income borrowers is generally facilitated via mobile phones. In South Africa, 40.9% of households have at least one member who either uses the internet at home or has access to it elsewhere (Stats SA 2014). On the surface, this sounds promising, but only 10% of households have internet access at home. That means that 30% of the people who go online do it either at work (16%), school/university (5.1%) or at an internet cafe (9.6%) (Stats SA 2014). Lower-income groups mostly cannot afford the internet, but more users will come online as data rates continue to fall.

Generally, lenders come from middle- to upper-income groups with daily access to the internet through a number of devices. Borrowers, on the other hand, tend to belong to middle- to lower-income groups with lower internet accessibility. Figure

4.7 illustrates the income links between lenders and borrowers. Funds are lent by middle- and upper-income earners to lower- and middle-income earners.

Lenders	Upper income		Borrowers
	Middle income	Middle income	
		Lower income	

Figure 4.7 Income matches between lenders and borrowers of a P2P transaction

Source: (Own compilation)

A challenge many intermediaries who attempt to service the lower- and middle-income market face is the ability to connect with this market in an efficient and viable manner. Mobile platforms may offer a good alternative, but the adoption of such channels takes time.

As an online marketplace, a P2P platform generally matches lenders and borrowers through innovative credit-scoring techniques and performs credit vetting on the borrower, as well as collects and disburses funds between parties (PwC 2015).

A P2P platform is an application technique to assist in decision-making. Generally, when facing risk, the decision maker has to make choices but does not know what the appropriate one is (Vivian 2015). Tools can be used to assist decision makers to arrive at an appropriate decision (Vivian 2015). A P2P platform is such a tool.

Peer-to-peer platforms generate revenue for their services in several ways, including origination fees charged to borrowers, from a portion of the interest charged to investors as servicing fees and additional charges like late fees (PwC 2015). Once lenders and borrowers agree on a rate for the loan transaction – say 15% – there are two ways a P2P platform could add a margin to the transaction. The first would be to deduct a margin, for example, 3% from the borrower’s repayment, or add the 3% to the borrower’s repayment. Alternatively – as is the

case for Lending Club – an upfront origination fee could be levied against the borrower, as shown in Figure 4.8. Lending Club levies different origination fees on various grades and durations of loans.

Loan Term	A			B	C	D	E	F	G
Sub-Grade	1	2 - 3	4 - 5	1 - 5	1 - 5	1 - 5	1 - 5	1 - 5	1 - 5
36-Month	1.11%	2.00%	3.00%	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%
60-Month	3.00%	3.00%	3.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%

Figure 4.8. Lending Club’s origination fee

Source: Lendingclub.com 2015

Peer-to-peer platforms also earn revenue from credit life insurance that is linked to the loan product. This is a risk-mitigation tool used by borrowers to reduce the possibility of default in the event of the borrower’s death. Credit life insurance generally pays off a loan in the event of the borrower’s death, disability or unemployment (Fein 2006). Peer-to-peer platforms may act as brokers for insurance firms and underwrite credit life products on behalf of insurers for a brokerage commission.

Importantly, a P2P platform’s involvement in loan transactions is a matchmaking and facilitative one (PwC 2015). All risks and decisions are taken by lenders and borrowers. Peer-to-peer intermediaries mitigate but do not solve the information asymmetry involved in traditional lending transactions. In fact, Freedman & Jin (2011) show that P2P lending still faces issues of information asymmetry, albeit lower than traditional financial institutions. Peer-to-peer platforms also provide a site on which all the relevant decision-making information is available for participants to make informed choices about their counterparts.

Critically, P2P intermediaries do not own the money they facilitate (PwC 2015) in the same way banks do. Banks create money through the “money multiplier” because banks are deemed to be the legal owners of the depositor’s money. The money multiplier most often measures the maximum amount of commercial bank

money that can be created by providing loans from deposits. The total amount of loans banks are allowed to extend is a multiple of its reserves or deposits (Krugman & Wells 2009). Through the process of lending these deposits, banks create money in the economy (Krugman & Wells 2009). Peer-to-peer intermediaries merely facilitate the flow of funds between parties, and no money is created.

Another notable distinction between P2P intermediaries and traditional banking institutions is that money is not pooled initially and then lent out. Depositors of money into traditional banking institutions do not know to whom their funds have been lent. In P2P lending, lenders decide which loan to invest in and which borrower risks are acceptable (PwC 2015). Peer-to-peer lenders are certain that their invested funds are given directly to borrowers they approve of. This has an impact on risk and diversification; traditionally, pooled deposits spread the risks associated with loans and defaults.

Finally, P2P intermediaries require a specific set of investments in crucial areas that will allow for the proper functioning of a P2P platform. This set of investments includes attention to the customer interface, lender-investment tracking, security, credit scoring and screening, speed of transactions, compliance and governance. These may be seen as traditional focus areas, but P2P intermediaries need to facilitate this information flow to the users for informed decision-making. This is largely based on the quality of the algorithms used to screen borrowers (*The Economist* 2014).

4.5. Risk mitigation

The importance of risk mitigation in P2P intermediation cannot be underestimated – it is crucial to ensuring the platform’s smooth functioning. Risk mitigation is the application of measures to reduce the likelihood of an unwanted occurrence and/or its consequences (Nemeth 2013). This is the reduction of default through either moral hazard or adverse selection.

Peer-to-peer risk mitigation by intermediaries can be divided into four distinct processes:

1. formal credit vetting;
2. behavioural underwriting;
3. default insurance; and
4. loan rounds.

4.5.1. Formal credit vetting

Formal credit vetting tracks a borrower's credit behaviour and measures it against a predefined scale. The vetting involves the use of formal credit bureaus to gather information about any judgements against the potential borrower, defaults on other loans, and high or unmanageable debt. A credit bureau functions as a database of information about a borrower (Pritchard 2016). Formal risk measures include analysing income, surety, collateral, employment, age, demographics, location and ownership of residence, confirmation of mobile or email address, confirmation of IP address used and net wealth status (Pritchard 2016).

Formal credit vetting reduces the probability of adverse selection associated with a borrower and a credit agreement. Credit vetting is based on sorting borrowers into groups and then making predictions about future behaviour on the basis of past behaviour (Rona-Tas 2002).

Access to this data builds a creditworthiness rating for individuals, which is then used by lenders to assist in their credit decisions. This is the same approach used by traditional lenders, but here the information is aggregated and scored by the P2P platform and made available to lenders. Based on the information supplied by the internal scoring process, a guideline or suggestion is provided by the intermediary to the lender on what the pricing of the loan should be.

4.5.2. Behavioural underwriting

Non-credit bureau-based underwriting is an area that shows great promise in the developing world. Indeed, in China, social credit scoring performed by Sesame Credit is due to score some 900 million people by 2020 (Chishti & Barberis 2016). Behavioural underwriting incorporates the borrower's social groups, networks and endorsements from friends and family. To a large extent, this is unverifiable third-party data. It includes involvement from a wider audience outside those involved in the credit transaction. Behavioural underwriting is often made up of a number of people and organisations vouching for the credibility of an individual. This is important as the performance of the loan implicates more than just the borrower; it potentially involves family members or bosses. Third parties' reputations are affected by the non-performance of a borrower.

The incorporation of behavioural underwriting induces a kind of peer pressure for the borrower to pay back their loan as per the agreement. An online P2P community is linked to endorsements or backing from an offline community. In the online-to-offline model, borrowers are recommended offline by small credit institutions or guarantee companies. After revision by the platform, project information will be posted on the platform (She & Zhang 2014). The borrower publicises their loan transaction and is held to account by both the online and offline P2P community. There is a social stigma, not only online but also offline, in defaulting on a P2P loan because of the number of people with knowledge of and associations with the P2P transaction. In this way, behavioural underwriting attempts to reduce the probability of moral hazard associated with borrowers and credit agreements.

There are strides being made with respect to alternative ways of assessing a borrower's creditworthiness. Psychometric credit scoring has recently been employed as an additional metric to measure an individual's character and their inclination to repay credit agreements (Shoham 2004). This psychometric innovation generally relates to the evaluation of the creditworthiness of organisations such as business borrowers. In particular, this innovation relates to

an automated creditworthiness scoring system for businesses that uses predictive modelling to perform pattern recognition and classification to assess the impact of the personalities of individuals associated with the business on the business's creditworthiness (Shoham 2004). Psychometric credit scoring tests the level of the borrower's moral hazard – at which point the borrower is expected to choose to default – and the likelihood of them repaying their debt. These innovations may address the limitations of traditional credit scores in developing economies where individuals lack credit histories. Underwriting based on behavioural data, using machine learning, neural networks and other advanced statistical techniques, will provide scalability for financial institutions to offer more to those still without access to credit (Chishti & Barberis 2016). Psychometric credit scoring is fairly new and is still being tested through traditional intermediaries; however there are intriguing studies done by Masters (1982; 1988) that show promising results for partial credit scoring using innovative techniques. This method could offer P2P intermediaries deeper insights into the character of borrowers.

4.5.3. Default insurance

Zopa and Rate Setter, both UK-based P2P platforms, have provision funds that aim – but do not promise – to make good on loans that sour (*The Economist* 2014). If a borrower defaults on a loan, lenders can claim back a portion of that default from the provision fund, which acts as default insurance. The implication for lenders is that a portion of their risk is mitigated (*The Economist* 2014). The incentive for Zopa and Rate Setter is to apply stricter credit-scoring techniques to borrowers to achieve a low level of default.

Formal insurance in the form of credit life insurance is also utilised by P2P platforms. As described above, credit life insurance is taken out in case of the death of a borrower. The insurance policy will repay the outstanding debt to the lender in the event of a borrower's death.

4.5.4. Loan rounds

Another evolution in risk-mitigation techniques utilised by the microfinance industry and P2P platforms is the use of loan rounds, such as those carried out in Burkina Faso through Burkina Bail and Egypt's Banque Misr, where loans were restricted to rounds of funding that increased loan by loan or round by round. To ensure borrowers repay their loans, they would be given a smaller amount than the amount requested, and once that first loan is repaid, the borrower would then qualify for a larger loan in the second loan round, and so on. This is a risk-mitigation technique to limit defaults by borrowers where information and/or credit history is limited.

4.6. Legislation

The financial services industry in South Africa is among the most regulated in the world, the results of which can be seen in the manner in which the South African financial sector navigated the recent financial crisis. The South African financial sector did not experience the financial upheaval seen in advanced economies during the 2008/2009 period (National Treasury 2011).

It is important to realise that the South African financial system was protected by a much broader set of prudent economic, fiscal and financial sector policies that insulated the economy from the worst of the global shocks (National Treasury 2011).

The regulation in South Africa protects the financial sector, but also often inhibits participation and innovation. Internationally, P2P intermediaries do not have to comply with acts, such as the NCA, the Banks Act, 1990 (Act No. 94 of 1990), and the CPA, that are in effect in South Africa. There are variations of some of these acts internationally, but none are as strict as those in South Africa. In fact, in India, there have been calls for less regulation and more leeway in microfinance institutions to reduce unbanked numbers (Shankar 2010). Some large microfinance institutions (MFIs) have been allowed to convert their licence from a

pure loans MFI to a special category MFI with lower initial capital requirements that offer savings as well as mobile payment services (Shankar 2010). This reduces the unbanked and financially vulnerable population.

An important piece of legislation in the United States is the Dodd-Frank Act, which mandated the government accountability office to study P2P lending and suggest its optimal regulatory regime (Verstein 2011). The study resulted in the formalisation of legislation to regulate the P2P finance industry. It is important to keep an eye on the legislation passed abroad, as variations of this legislation will most likely be adopted in developing economies.

Some of the legislative checks and balances in place are very complex. What follows is a list explicating the types of intricacies they involve.

1. Under the South African Banks Act, a company wishing to take deposits is required to register as a bank. A banking licence is estimated to cost circa R250 million. This severely hampers P2P lenders in the manner in which they collect investments from lenders, as this could be viewed under the Banks Act as accepting deposits. The Banks Act also prescribes activities relating to capital adequacy and liquidity, governance reporting and other things.
2. Peer-to-peer intermediaries in South Africa need to adhere to the rules and regulations set out in the NCA, which dictates the maximum lending rate charged on specific credit products. Although P2P platforms do not set interest rates between lenders and borrowers, it is required to regulate the charges to fall within the NCA.
3. Internationally, rates of credit products are determined on an auction-like basis, with market forces determining the market rate. When internet-based crowdfunding markets emerged in the past decade, auctions were often adopted as the typical funding mechanism to match borrowers and lenders, which P2P intermediaries need to moderate (Wei & Lin 2013).

4. More recently, the National Credit Amendment Act was passed; it provides clarity on some sections in the NCA as well as outlines new compliance measures. These include eradicating the minimum registration requirements for credit providers, as well as instituting prescribed debt timelines. The act forces all credit providers, regardless of their book size and loan agreement numbers, to register as a credit provider. Previously, there was a R500 000 loan book and 100 loan agreement thresholds before a credit provider was required to register with the NCR, allowing small lenders to operate without a compliance burden. It's now unclear if individual lenders in a P2P contract are considered a credit provider without the previous threshold, plus there is also a three-year limit on debt agreements before that debt prescribes and essentially becomes an expired obligation. Once debt has prescribed, it is no longer part of an enforceable credit agreement.
5. Prescriptions are also followed by financial institutions with respect to the Financial Intelligence Centre Act (FICA), Financial Advisory and Intermediary Services (FAIS), the Regulation of Interception of Communications and Provision of Communication-related Information Act (RICA), CPA, and the banking regulation process Know Your Customer. All this legislation adds bureaucracy and reporting costs to organisations. In an interview with the NCR's research division, researchers admitted that the legislation is a doubled-edged sword for regulators: on the one hand, it protects consumers, but on the other, it also dampens the activity of providers.
6. In addition to the legislation mentioned above, there is a discussion paper published by the NCR to regulate credit life insurance linked to credit agreements (Ensor 2013).

7. An important regulator of financial services companies is the Financial Services Board (FSB). South African financial services companies must comply with the board's prescriptions. An unknown variable in the legislative sphere is the proposed Twin Peaks method for financial regulation. The Twin Peaks model of financial sector regulation aims to observe the creation of a prudential regulator – the Prudential Authority – housed in the South African Reserve Bank (SARB), while the FSB will be transformed into a dedicated market conduct regulator: the Financial Sector Conduct Authority (FSB 2014). It is under consideration at present, but the aim is to implement this legislation within the short term. The implications for P2P lenders will be more legislation with which to comply, and two regulating bodies instead of one.

4.7. Peer-to-peer lending in South Africa

Peer-to-peer lending takes place in both the formal and informal markets in South Africa. There are very important differences and similarities between the activities of market participants, such as peer pressure and the flow of information.

4.7.1. The status of informal peer-to-peer lending in South Africa

Peer-to-peer lending in South Africa has largely been based in the informal market through individuals grouped into stokvels. As described in Chapter 3, informal unsecured lending has existed for many years in South Africa.

Estimates have placed the value currently invested in informal stokvels and savings clubs in South Africa at between R33 billion and R42 billion (Van Wyk *et al.* 2012). More recent estimates place the value of stokvels in South Africa at about R25 billion, with some 8.6 million members (Ensor 2014).

Traditionally, stokvels or savings clubs have had a strong following in lower- and middle-income groups, but recently they have begun to include higher-income

earners. Stokvels do not rely on collateral to guarantee loans because social pressure and monitoring are substitutes (Jones *et al.* 2000).

Stokvels also pool funds, the credit of which may be disbursed to their members (Oosthuizen 2002). When members require credit, two processes are executed before any money is lent: behavioural underwriting and peer pressure.

Certain characteristics of stokvels can be transferred to formal P2P lenders. Stokvel members can better assess risk because they have more information about other members. The primary purpose of membership in a traditional microfinance lending group is to mitigate default risk through improved selection, monitoring and enforcement. Soft insider information allows better selection of new members by existing group members (Everett 2010). The same thinking could be applied to P2P lending, where more detailed soft information about borrowers is gained by potential lenders.

4.7.2. The status of formal peer-to-peer lending in South Africa

In July 2012, the first South African P2P lending company, RainFin, was officially launched. In April 2014, Lendico was launched and more recently Prodigy Finance.

RainFin, Lendico and Prodigy follow the practices of US and UK P2P lenders by facilitating loans between individuals and businesses. South Africans now have a realistic alternative to lending from a traditional credit provider.

RainFin, Lendico and Prodigy use the internet to connect lenders and borrowers via an online marketplace that offers lenders higher returns than traditional savings products, and borrowers lower rates on their loans.

RainFin carefully navigates the legislative environment in South Africa by incorporating traditional banking trust accounts into its fund-management system. In this way, it avoids Banks Act guidelines on accepting deposits. A trust account allows RainFin to manage funds on behalf of lenders and borrowers, and not

accept deposits, which would require a banking licence that is prohibitively expensive. In late 2014, RainFin announced that it had sold a 49% equity stake to Barclays Africa, previously Absa (Ndzamela 2014).

Lendico is an international P2P platform that has customised its marketplace to suit the participants of the South African market. Lendico South Africa is part of Africa Internet Holding, and is backed by Rocket Internet, Millicom and MTN (Mungadze 2014).

Prodigy Finance facilitates loans to international postgraduate students at leading business schools through their community platform, alumni and other investors who earn competitive returns, while students gain access to higher education they otherwise might not have been able to finance (Prodigy 2016).

It is too early to speculate whether formal P2P lending in South Africa will take off at the rate at which it has done in the US and Britain, but P2P lending may offer a viable alternative to both lenders and borrowers in servicing their investment and credit needs.

4.7.3. Main differences between formal and informal peer-to-peer lending in South Africa

The main difference between formal and informal P2P lending is found in the degree of separation between participants. This could relate to the theory of the six degrees of separation, which suggests that everyone in the world is separated from everyone else by six links (Berman 2006). The higher the degree of separation between individuals in a P2P loan, the higher the degree of abstraction and vagueness there is in the information used to make lending decisions. Stokvels have a lower degree of separation than online P2P platforms. Participants who know one another intimately, as in stokvels, have a deeper data set when compared with participants who meet on an online P2P lending platform.

The degree of separation influences the type of information lenders and borrowers have about one another. The closer participants are to one another, the more

information they can gather through behaviour, reputation, lifestyle and social groupings. This soft information, added to hard information such as credit scores, defaults and judgement listings, creates an insightful picture of the borrower. The further away participants are from one another, the vaguer and more abstract that information becomes.

Informal P2P lenders have a greater degree or access to granular behavioural underwriting data, higher peer pressure and a relatively low transaction cost, but they also have limited asset allocation choices (limited to members of the group) and limited default recourse. Formal P2P lenders have less informal behavioural underwriting data, more formal credit vetting data, lower group peer pressure, a relatively low transaction cost, higher asset allocation choices (expanded by the internet) and more default recourse.

4.8. Link to problem statement

Peer-to-peer lending provides an intriguing alternative to traditional unsecured lending in that it incorporates a number of success factors from informal unsecured lending that appear to promote a higher level of sustainability. Peer-to-peer lending as an alternative model might address some shortcomings of formal or traditional unsecured lending. However, there are a number of unknown variables that need to be understood in more detail yet there has been insufficient research into the application of P2P lending in South Africa.

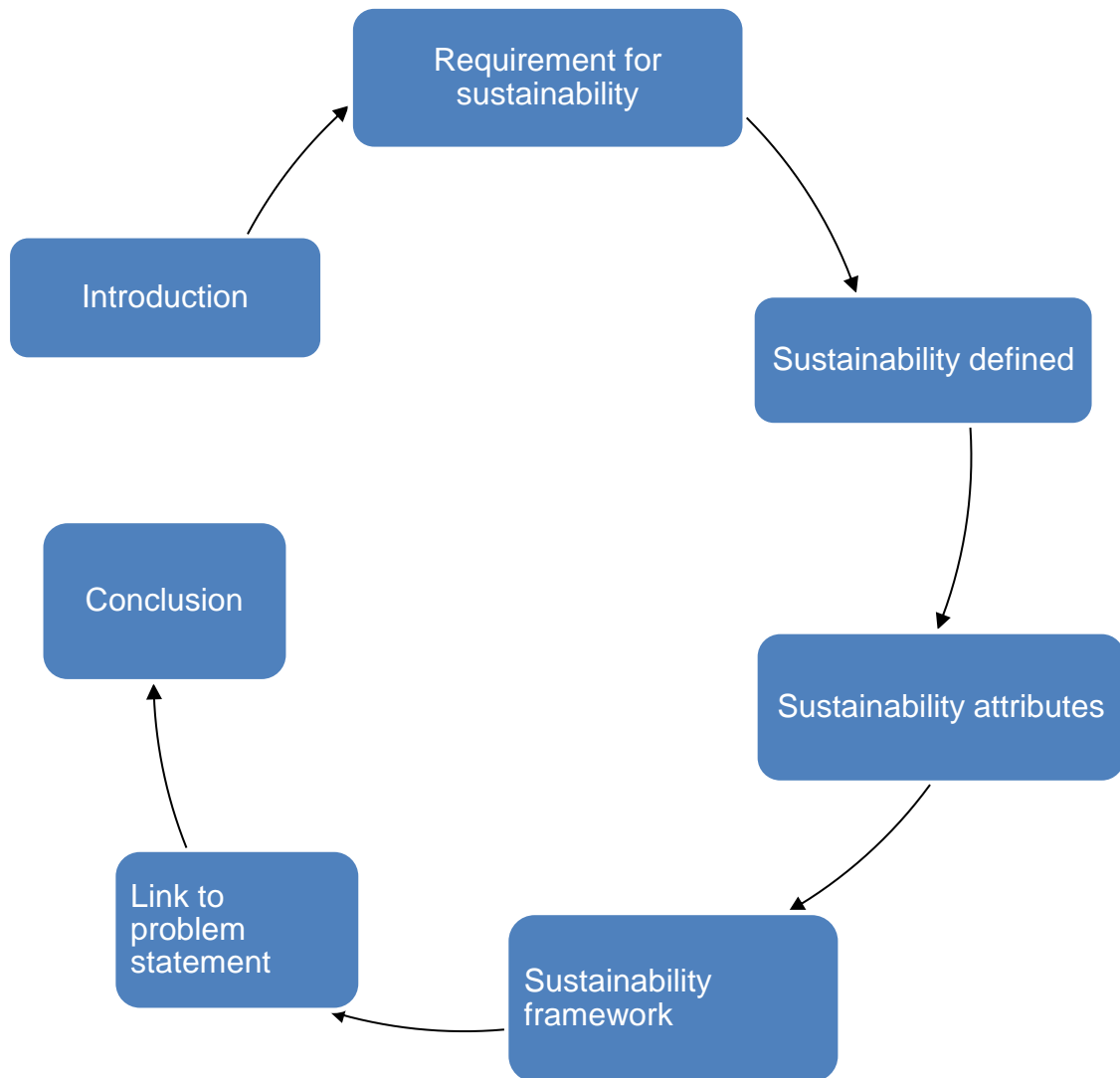
4.9. Conclusion

Peer-to-peer lending could offer a workable solution to lending and borrowing money. It addresses both adverse selection and moral hazard through behavioural underwriting and peer pressure, which are the natural benefits of the disintermediation of the lending process. The result could be a decrease in credit costs and an increase in loan repayments. The platform also facilitates the dissemination of information between lenders and borrowers, thereby minimising the asymmetry of information between loan participants.

A disadvantage of P2P lending is that the risk of default is held by individuals and not companies. However, P2P lenders spread their risk of default across several borrowers so that the number of defaults are fewer. The amount lost in the event of a default is significantly lower than traditional lenders would face because the loss is experienced by a number of individuals, and is not limited to one credit provider or institution. This could decrease the propensity from these lenders to extend credit in the future.

Chapter 5 explores the concept of sustainability and its application to unsecured lending in South Africa.

Chapter 5: Sustainability framework



5.1. Introduction

This chapter focuses on the concept of sustainability within unsecured lending. It defines the attributes of sustainability within the formal and informal unsecured lending environments, and introduces a sustainable framework to ascertain the level of sustainability within cities and its modified sustainability view within unsecured lending. The outcomes of the investigation into the adapted sustainability framework are reported later in this study.

5.2. The sustainability requirement within the unsecured lending industry

Unsecured lending in South Africa has always had its detractors. Since 1992, when an exemption to the Usury Act was first granted to allow micro-lenders to operate legally, there have been people who are uncomfortable with the practice (Cairns 2014).

Unsecured lending exists because there is a market and need for this type of credit. However, some unsecured lending business models practiced by micro-lenders in South Africa are exploitative, degrading and profoundly negative in their impact on the economy (Cairns 2014).

The need for sustainability within the unsecured lending industry manifests itself in the over-indebted consumer in South Africa. The level of household-debt-to-income ratio is approximately 74%, a significant increase from 55% in 2004 (NCR 2013). Couple this with the fact that 50% of all credit-active consumers in South Africa have impaired credit histories, and it is clear the market is ailing (NCR 2013).

Government has attempted to stabilise the market with regulations and refinements of those regulations, but consumers remain under constant financial pressure. Government's credit amnesties expose the unsustainability of the

unsecured lending market. South Africa has seen two credit amnesties within seven years (in 2007 and 2014), which enabled the re-entry of indebted consumers into the credit market and revived consumer demand (CGCSA 2013).

The problem with a credit amnesty is that it addresses the outcome of the overuse of credit and not the source or problem, which is how the credit is used. Amnesty is not a viable option for the South African consumer – it is a short-term solution to a deep-rooted problem. By enforcing a credit amnesty, governing authorities treat the symptoms rather than discovering the cause, thus softening the blow of not paying creditors. Careful management of personal finances over a period of time may clear a consumer's record and teach them to budget better and create a financially secure future (Du Plessis 2013). An amnesty is only a short-term reprieve, but the market seems to rely on amnesties for a reboot or revival.

The removal of public information of judgements and defaults does not change borrowers' repayment behaviour. Statistics from the 2007 amnesty show that 74% of the consumers who benefited ended up with even more listings on their credit records than before (LIPCO 2013).

5.3. Defining sustainability

“Sustainability” can mean to “maintain”, “support” or “endure (*Oxford English Dictionary*). Sustainability is the ability to continue a defined behaviour indefinitely; it is based on three dimensions: social sustainability, environmental sustainability and economic sustainability (Gulliksson 2015). Adams and Frost (2006) postulate that sustainability is the reconciliation of social, environmental and economic objectives. If these objectives were drawn in circles, as illustrated in Figure 5.1, the outcomes would reveal different results. For instance, when only social and economic objectives are met, the result is equitable but not sustainable. Only when all three objectives are met is the result sustainable.

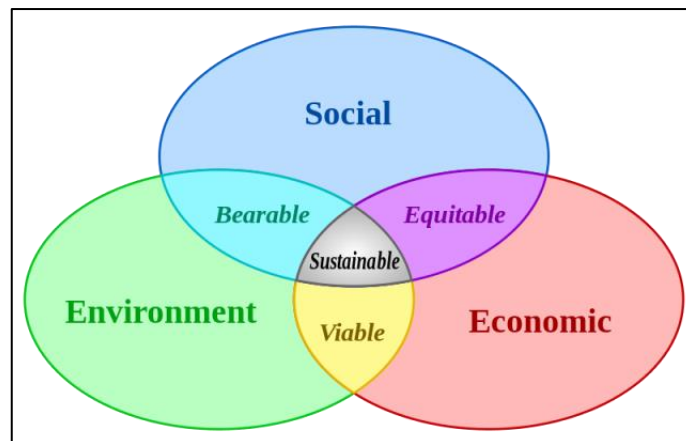


Figure 5.1 Venn diagram of sustainable development
Source: Adams and Frost 2006

5.3.1. Sustainability within communities

The approach to selecting an appropriate sustainability framework began with an analysis of the literature on sustainability models. The basis of sustainability models stem from the work of Egan (2004) and Adams and Frost (2006). Typically, in sustainable development discourse, this is depicted in the form of overlapping or concentric circles (Manzi 2010). The circles contain social, economic and environmental content.

Adams's Venn diagram (Figure 5.1) – exhibiting the three overlapping circles sustainability model – forms the basis for a number of sustainability models. There are two variations of this model:

- the three-legged sustainability stool (Dawe & Ryan 2003); and
- the three-nested dependencies model.

A major criticism of these models is that they do not allow for a specific investigation of sustainability within a field of study (Willard 2010). Typically, they lend themselves to a general investigation into sustainability and not the sustainability of a unit of study within an environment. In an attempt to address the shortcoming highlighted by Willard, this study investigated sustainability models that examined a specific unit of study. Egan (2004) developed a framework for

evaluating sustainability within communities, and defined sustainable communities as those that met the diverse needs of existing and future residents, contributed to a high quality of life, and provided opportunity and choice. They achieve this through effectively using natural resources, enhancing the environment, promoting social cohesion and inclusion, and strengthening economic prosperity (Egan 2004).

Egan’s model (Figure 5.2) delineates sustainable communities into several categories, which include general areas such as economy, environment, governance, and social and cultural (macroeconomic). These areas incorporate the sub environments of transport and connectivity, services and housing, and the built environment (microeconomic).

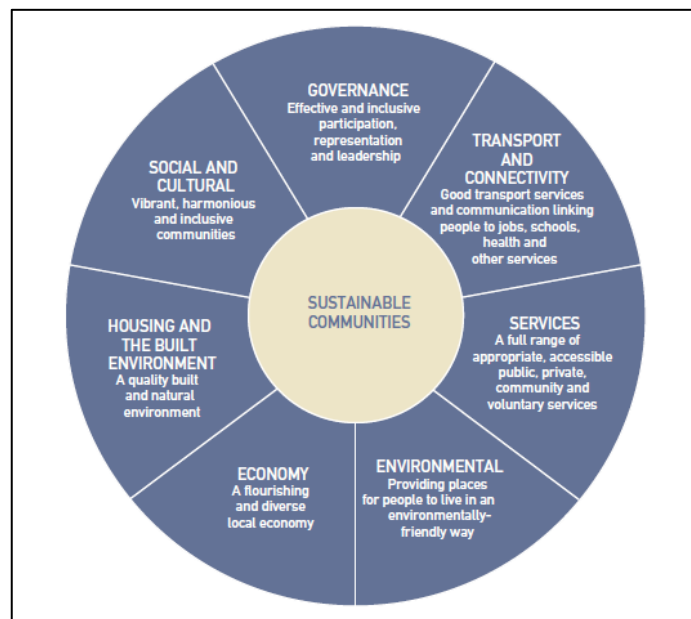


Figure 5.2 Components of sustainable communities
Source: Egan 2004

The strength of Egan’s model lays in the combination of macro and micro variables, and the inclusion of a specific unit of study – in this case, communities. A common theme through both Egan and Adams’s sustainability models are the investigation of three macro areas: social, economic and environmental. Egan also includes other areas that relate to the study of sustainable communities. A similar

approach was taken in adapting the circles of sustainability model by including macro and micro variables applicable to unsecured lending in South Africa.

5.3.2. Circles of sustainability model

Continuing the examination of suitable sustainability models, the United Nations' Global Compact Cities Programme (GCCP) (Figure 5.2) developed a circles of sustainability model so that cities and communities can be recreated to "meet the needs of the present without compromising the ability of future generations to meet their own needs" (GCCP 2012). This sentiment can be directly applied to unsecured lending. The current generation's access to debt may mean they often overcommit to debt obligations at the expense of future generations' access to developmental activities. This is evident when people overindulge in credit, leading to over-indebtedness and lack of further access to credit. This ultimately leads to future generations not being able to access services such as education or housing, as these are typically funded through credit by parents or guardians.

Cities face the same issues that have overwhelmed nation states and corporations when it comes to sustainable development, but in different terms (GCCP, 2012). Cities and corporations have to evolve into sustainable entities for longevity, resilience and stability.

An interesting development in sustainability models that the programme focused on is the link between local and global sustainability. There is a distinct link between macro variables at an international level, and micro variables at a domestic or city level.

The circles of sustainability model includes areas such as economics, ecology, politics and culture. These produce a sustainability rating that ranges between critical and vibrant (GCCP 2012). The ecology category specifically relates to an evaluation of the sustainability of a city, but this could be replaced with a subject-specific perspective and allow the model to be applied to a number of studies.

The circles of sustainability model offers a solution to the issues that occur when splitting the social category into political and cultural categories (Willard 2010). It also offers a way to explore the sustainability of unsecured lending from both a general economic level and a specific, granular level.

5.4. Sustainability attributes

It's important for this study to define the key concepts of a sustainable unsecured lending solution. Theoretically, a sustainable unsecured lending solution is straightforward: money is lent at low rates and the borrower repayment rates are high (actions that can be repeated indefinitely). The two pillars of sustainability are cost and repayment.

5.4.1. Cost

The first pillar of sustainability in unsecured lending is cost, which has two principal dimensions:

1. the financial cost of the transaction; and
2. the opportunity cost of the transaction.

The financial cost of unsecured lending transactions relates directly to the interest and fees the lender levies on the loan agreement. The NCA's interest rate cap allows for interest charges that are much higher than would have been permitted under the Usury Act. This increases the financial burden on borrowers encumbered with unsecured forms of credit (Rees 2013).

The increased burden is associated with adverse selection in the ex-post situation – the higher the repayment burden, the more likely the borrower will not have the financial resources to repay the loan.

The opportunity cost is more abstract, and cannot be as readily measured as the financial cost. An opportunity cost of a decision is the value of the next-best alternative the decision forces the decision maker to forgo (Baumol 2011). The

opportunity cost within unsecured lending links to the use of the credit, either for developmental or consumption purposes. There is an opportunity cost paid by the borrower when credit is used for consumption purposes, which ultimately results in a decrease in wealth. Development credit will eventually increase the borrower's wealth.

5.4.2. Repayment

The second pillar of sustainability is repayment, which has a number of dimensions:

1. moral hazard and adverse selection;
2. loss incurred by the lender;
3. recourse against the borrower; and
4. further credit.

Moral hazard is a choice made by a borrower not to repay debt even though they have the financial resources to do so (Mas-Colell *et al.* 1995). Adverse selection is when the borrower does not have the financial resources to repay the loan; they might be willing to pay, but simply do not have the resources (Polborn *et al.* 2006). Throughout the credit-vetting process, the lender needs to assess the ability of the borrower to repay the loan.

If a loan is not repaid, the lender incurs a loss. The capital amount lent out and the revenue that would have been generated from this credit agreement are included in this loss. Non-performing assets, if not recovered, are written off or – even if partly recovered – require more provisioning, which recognises a reduction in the realisable value of loans (Laurin 2003). Reduced profitability decreases shareholder value of the lender (Popli & Puri 2013).

Once a borrower has defaulted on their loan, the lender is required to follow specific legal processes governed by the NCA in an attempt to recoup the outstanding amount. These legislative proceedings aim to either restructure the debt or secure a judgement against the borrower (NCA 2007). The lender may try

to restructure the borrower's debt terms. Debt restructuring usually includes an extension of the term of the loan, which decreases the monthly instalments paid by the borrower and is cheaper than attempting to secure a judgement against the borrower (NCA 2007). A judgement may include repossession of the borrower's assets to the value of the outstanding debt, or securing an emolument attachment order (EAO), which is the preferred option. An EAO is enacted by a court order that forces a portion of the debtor's salary to be paid over by the employer to the credit provider (Mars 2008).

5.4.3. Sustainable attribute links

Both cost and repayment are fundamental to a sustainable unsecured lending solution. However, this is a need to consider sustainability of the entire industry, which requires the use of a framework.

5.5. Sustainability framework: Circles of sustainability

This study utilises the design and principles of the United Nations' GCCP and its circles of sustainability model to measure the unsecured lending industry in South Africa. The model will be adapted to focus on specifics relating to the South African unsecured lending industry, but the approach will remain consistent.

5.5.1. Circles of sustainability explored

The United Nations Millennium Declaration developed a sustainability model called circles of sustainability, which primarily focused on sustainable urban development and was adopted by the organisation's Global Compact Cities Programme (GCCP 2008). This model identifies four pillars of sustainability: economic, ecological, political and cultural.

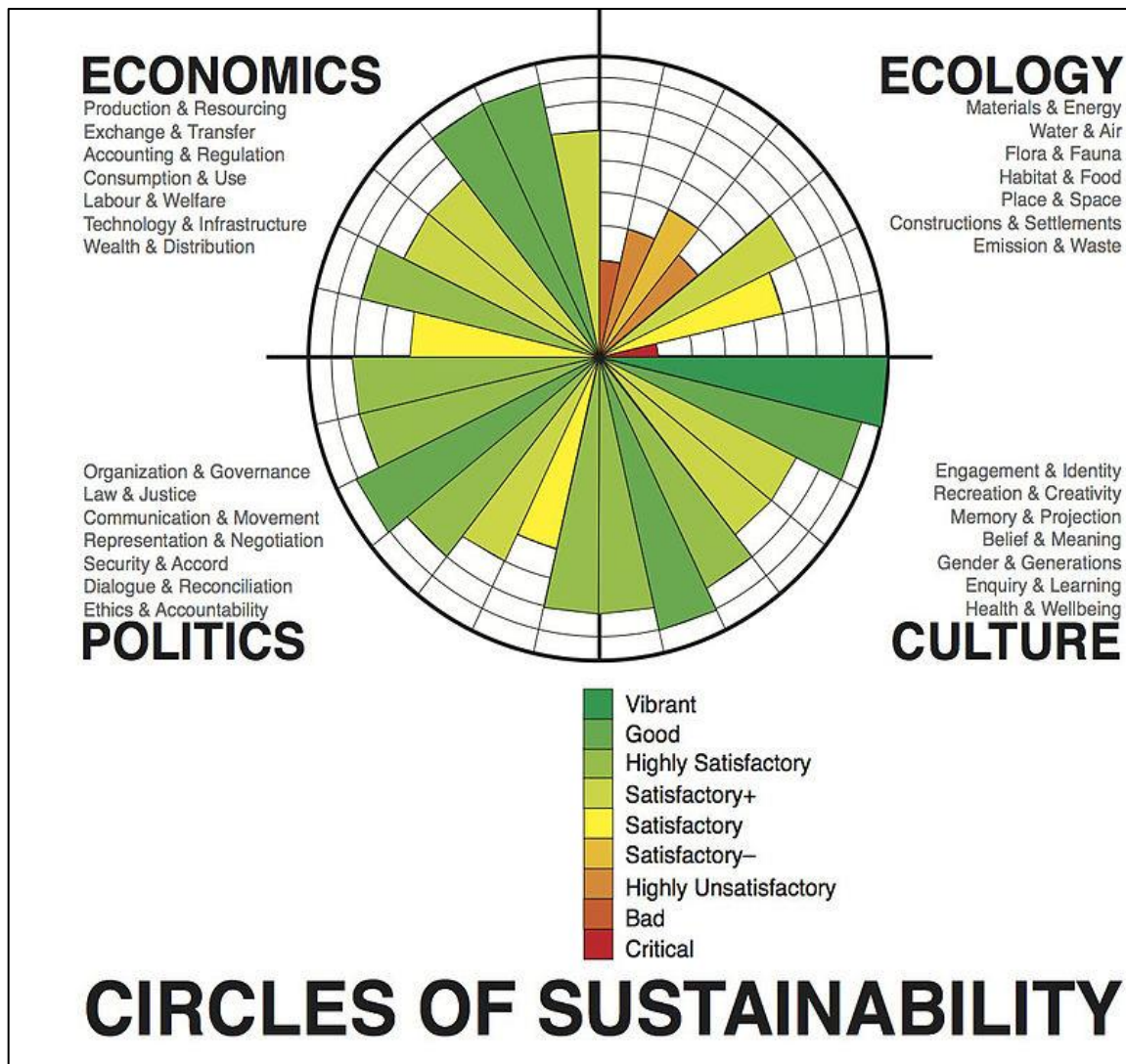


Figure 5.3 Example of a circles of sustainability representation; in this case for Melbourne, Australia, in 2011

Source: GCCP 2008

The circles of sustainability model has four main categories, each of which has seven subcategories. Each sub-category is ranked on a scale of one (1) to nine (9).

Category 1: Economics

The economics category is defined as the practices and meanings associated with the production, use and management of resources (GCCP 2008), such as:

1. production and resourcing;
2. exchange and transfer;
3. accounting and regulation;
4. consumption and use;
5. labour and welfare;
6. technology and infrastructure; and
7. wealth and distribution.

Category 2: Ecology

The ecology category is defined as the practices and meanings that occur across the intersection between the social and the natural realms, focusing on the importance of human engagement with and within nature, but also including the built environment (GCCP 2008). The ecology aspect includes:

1. materials and energy;
2. water and air;
3. flora and fauna;
4. habitat and settlements;
5. built-form and transport;
6. embodiment and sustenance; and
7. emission and waste.

Category 3: Politics

The politics category is defined as the practices and definitions associated with basic issues of social power, such as organisation, authorisation, legitimation and regulation (GCCP 2008). The parameters of this category include broad social relations in general, as well as public and private governance, such as:

1. organisation and governance;
2. law and justice;
3. communication and critique;
4. representation and negotiation;

5. security and accord;
6. dialogue and reconciliation; and
7. ethics and accountability.

Category 4: Culture

The culture category is defined as the practices, discourses and material expressions of societal meaning (GCCP 2008), including:

1. identity and engagement;
2. creativity and recreation;
3. memory and projection;
4. belief and ideas;
5. gender and generations;
6. enquiry and learning; and
7. well-being and health.

Each subcategory has seven questions that need to be answered using the nine-point rating scale, which allocates one point for a critical rating and nine points for a vibrant rating (GCCP 2008).

Table 5.1 Circles of sustainability rating scale

1	2	3	4	5	6	7	8	9
Critical	Bad	Highly Unsatisfactory	Satisfactory ⁻	Satisfactory	Satisfactory ⁺	Highly Satisfactory	Good	Vibrant

Source: GCCP 2008 The approach requires critical judgement on a nine-point scale of sustainability that ranges from critical to vibrant. Critical sustainability means a level of sustainability that requires critical or urgent change to be assured of continuing viability, whereas vibrant sustainability means a level of sustainability that is active in reproducing social and environmental conditions for long-term positive viability (GCCP 2008). The mid-point, satisfactory sustainability, signifies a level of sustainability that allows for a basic equilibrium over the coming period (GCCP 2008).

Table 5.2 provides a summary of the structure of the urban profiling process used by the circles of sustainability approach.

Table 5.2 Summary of the structure of the urban profile process

Domains	Perspectives (or Subdomains)	Possible issues to consider
Ecology	<ul style="list-style-type: none"> • Materials and Energy • Water and Air • Flora and Fauna • Habitat and Settlements • Built-form and Transport • Embodiment and Food • Emission and Waste 	<ul style="list-style-type: none"> • Sources of energy including petroleum, food • Air quality; climate change and adaptation • Parks and gardens; tree coverage • Habitat destruction; land-use • Urban spatial development, housing • Physical human health, nutrition • Pollution, recycling and waste disposal
Economics	<ul style="list-style-type: none"> • Production and Resourcing • Exchange and Transfer • Accounting and Regulation • Consumption and Use • Labour and Welfare • Technology and Infrastructure • Wealth and Distribution 	<ul style="list-style-type: none"> • Industry and commerce; resources • Money; trade in goods and services • Regulatory systems • Consumption patterns; use of goods • Labour markets; economic provision • High-tech to low-level technologies • Poverty; unemployment; slums; inequality
Politics	<ul style="list-style-type: none"> • Organization and Governance • Law and Justice • Communication and Critique • Representation and Negotiation • Security and Accord • Dialogue and Reconciliation • Ethics and Accountability 	<ul style="list-style-type: none"> • Legitimacy, current system of governance • Legal system; political justice and order • The press, media, news; dissent and protest • Participation by citizens, voting; civility • Political tensions; military presence • Customary rights; Truth Commissions • Corruption issues; public ethics
Culture	<ul style="list-style-type: none"> • Identity and Engagement • Creativity and Recreation • Memory and Projection • Belief and Ideas • Gender and Generations • Enquiry and Learning • Health and Wellbeing 	<ul style="list-style-type: none"> • Ethnicities; identities; public engagement • Celebrations; events and rituals, sport • Indigenous history; museums; monuments • Religions and spiritualities; ideologies • Gender relations; family life; generations • Education and training systems • Health and medical systems; mental health

Source: GCCP, 2008

5.5.2. Model background and limitations

A criticism of the sustainability models is that they do not specifically address culture as an independent category of investigation. However, it may be argued that the social category in Adams’s sustainability model (Figure 5.1) includes a culture subcategory (Willard 2010).

Another criticism of these models is that they do not allow for a specific investigation of sustainability within a field of study (Willard 2010). Typically, they lend themselves to a general investigation into sustainability, and not sustainability of a unit of study within an environment.

The circles of sustainability framework offers a solution to both criticisms, splitting the social category into political and cultural investigations, and providing the ability to explore a specific unit of investigation from a general economic level as well as a specific and granular level.

5.6. Link to problem statement

A framework to assess the sustainability of an industry is relevant (and applicable) to this study. Understanding the drivers of the sustainability of unsecured lending involves unpacking the concepts of cost and repayment behaviours of both lenders and borrowers.

The current unsecured lending model can be judged to be unsustainable found on market-based behavioural evidence of lenders, borrowers and government.

When viewed through the sustainability framework, P2P lending may be considered an alternative model of unsecured lending. However, there has been insufficient research into P2P lending, and therefore knowledge of the sustainability of P2P lending as an alternative to traditional unsecured lending in South Africa is required; this is the focus of this study.

An adapted circles of sustainability model that replaces the ecology category with an unsecured lending category was applied by the researcher to formal unsecured lending, informal unsecured lending and P2P lending frameworks.

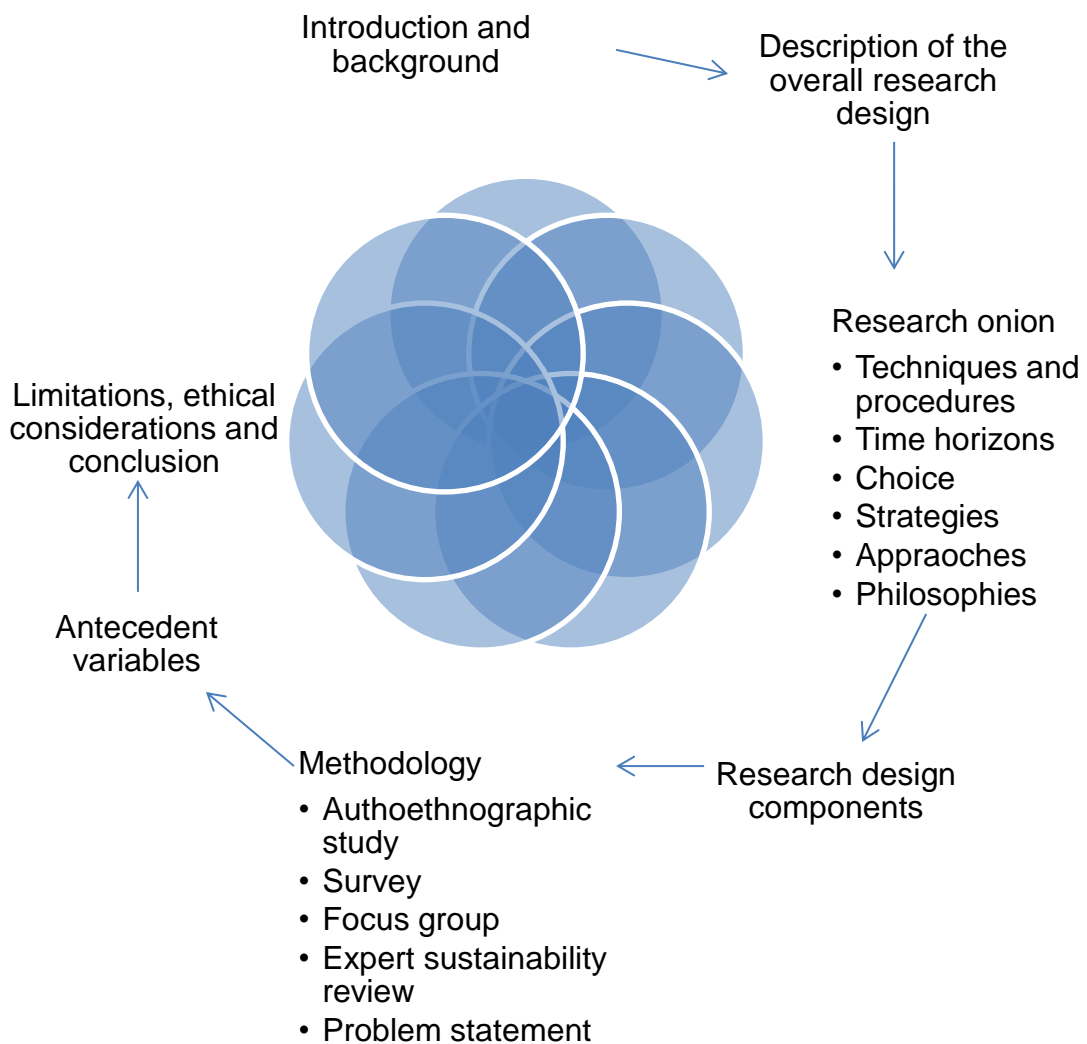
5.7. Conclusion

This chapter focused on the concept of sustainability within the unsecured lending environments in South Africa.

This chapter defined sustainability and investigated sustainability models, which were described within the context of unsecured lending. This highlighted a gap in current sustainability models.

Attributes of sustainability were reported. This chapter sets a foundation for an analysis of the adapted sustainability framework within unsecured lending in South Africa, and enables a focus on unsecured lending in South Africa once the research findings have been discussed and the trends highlighted. The next chapter considers the methodology of the study.

Chapter 6: Research methodology



6.1. Introduction

This chapter begins with a description of the overall research design and structure, which is encapsulated in the research “onion” of Saunders *et al* (2008). The chapter then details the techniques and procedures used in conducting this research.

The methodology section covers the research and data gathering of this study, specifically with regard to the study of the investigation, focus group, sustainability review and narrative study. These will link to the problem statement and show how each element contributes to the overall study. Thereafter, the methods of data analysis are discussed in detail to allow for reliability and trustworthiness of replication.

6.2. Background to the study

The study follows a deductive reasoning approach, moving from the general to the specific. The main difference between inductive and deductive approaches to research is that a deductive approach is aimed at testing theory, while an inductive approach is concerned with the generation of new theory emerging from data (Gabriel 2013). The topic of interest is the unsecured lending industry in South Africa; the research questions revolve around sustainability, and aim to provide insights into a sustainable unsecured lending industry. Through the data sources, evidence was gathered in various formats in an attempt to answer each research question from a triangulation perspective.

The research methodology this study uses is multimethod research, also referred to as mixed method research as it incorporates more than one method of data collection (Figure 6.1). Mixed method research is an umbrella term applying to almost any situation where one methodological approach is used in combination with another, usually, but not necessarily, involving a combination of at least some elements drawn from each qualitative and quantitative approach to research (Bazeley 2008). Mixed method research is regarded as the third methodological

movement that advocates methodological eclecticism that involves the utilisation of quantitative and qualitative approaches within a single study (Teddlie & Tashakkori 2012). One could argue that these approaches to professional and academic research emphasise that mono-method research can be improved through the use of multiple data, methods, methodologies, perspectives, standpoints and paradigms (Creswell 2004). This type of research includes the integration of qualitative and quantitative data and methods.

Qualitative research is characterised by its aims, which relate to understanding some aspect of social life, and its methods, which, in general, generate words, rather than numbers, as data for analysis (Patton & Cochran 2002). Qualitative methods generally aim to understand the experiences and attitudes of subjects, the community or individuals such as healthcare workers (Patton & Cochran 2002). These methods aim to answer questions about the what, how or why of a phenomenon rather than how many or how much, which are answered by quantitative methods. If the aim of a study is to understand life and how a community or individuals within it perceive a particular issue, qualitative methods are often appropriate (Patton & Cochran 2002). Most qualitative data are written texts, but increasingly, this data includes still and moving images and audio recordings of dialogues or narratives (Bernard & Ryan 2010). This study utilised dialogues and narratives to collect data for analysis.

Quantitative data is data that is numerical in the form of statistics, percentages and the like (Given 2008). The data is analysed with the help of statistics with the aim of yielding results that can be generalised to a larger population (Creswell 2004). Quantitative research is about asking people for their opinions in a structured way, so that one can produce numerical data and statistics as guidance. Reliable data depends on a fairly large sample size to be representative of the target market (Creswell 2004).

Mixed method research is both a method and methodology for conducting research that involves collecting, analysing, and integrating quantitative and qualitative research in a single study or a longitudinal programme of inquiry. Mixed

method research implies triangulation (Howe 2012). In mixed method research, the triangulation design entails collecting and analysing data concurrently and then comparing the results to bring out a comprehensive picture about the phenomenon under investigation (Ngulube & Ngulube 2014). Multiple research strategies are becoming researchers' choices of method due to the fact that methodological pluralism provides better quality data than a single approach (Creswell & Garrett 2008). Multiple perspectives give scope for interdisciplinarity (Ngulube & Ngulube 2014). The major attraction of mixed method research is that it can simultaneously address a diverse range of confirmatory and explanatory questions, while single approach studies often address only one or the other (Teddlie & Tashakkori 2012). The use of mixed method research by researchers in a discipline indicates their degree of awareness of the advantages that mixed method research provides to their research (Ngulube & Ngulube 2014). This study combines both types of data sources with the purpose of providing a better understanding of a research problem or issue than either research approach would do alone.

The strategy for inquiry into P2P lending is based on collecting quantitative and qualitative data from various sources. Quantitative data can be divided into two distinct groups: categorical and numerical. Categorical variables sort subjects according to common characteristics (Wetcher-Hendricks 2011), and categorical data refers to values that cannot be measured numerically but can be classified into sets according to the characteristics that identify or describe the variable or rank order (Wetcher-Hendricks 2011). Numerical data are considered quantitative, and are those values that are measured or counted numerically as quantities (Kuckartz 2014). This study used categorical data as a method of classification.

Moving from the type of data to the sampling used, probability sampling was used for research and data collection. It is a sampling technique in which every member of the population has a probability of selection (Zikmund 2009). The surveys were emailed directly to respondents to answer, and the subjects were invited via email meeting requests to attend focus groups.

All attempts were made to ensure a random sample of participants to the study. The limitation experienced with an online / electronic questionnaire eliminated some potential participants. Still, the sample is judged to be sufficiently random within the selected population.

Research, including a literature review, was conducted, incorporating content from various sources, the researcher's practical industry experience, industry experts, survey respondents and focus group subjects.

The use of unsecured and P2P lending was then assessed through a sustainability framework used by the United Nations Global Compact Cities Programme. This framework is adapted slightly to focus on the unsecured lending industry in South Africa. For-profit and not-for-profit lending processes are viewed through the adapted sustainability framework. This formed the foundation of the study, and allows further research into P2P lending as an alternative to unsecured lending in South Africa.

6.3. Description of the overall research design

The overall research design is encapsulated in the research onion of Saunders *et al* (2008). This onion illustrates the range of choices, paradigms, strategies and steps followed by researchers during the research process (Mafuwane, 2012). The research onion provides a summary of the important issues that need to be taken into consideration and reviewed before undertaking any research (Mafuwane 2012). Figure 6.1 is discussed in the next sections.

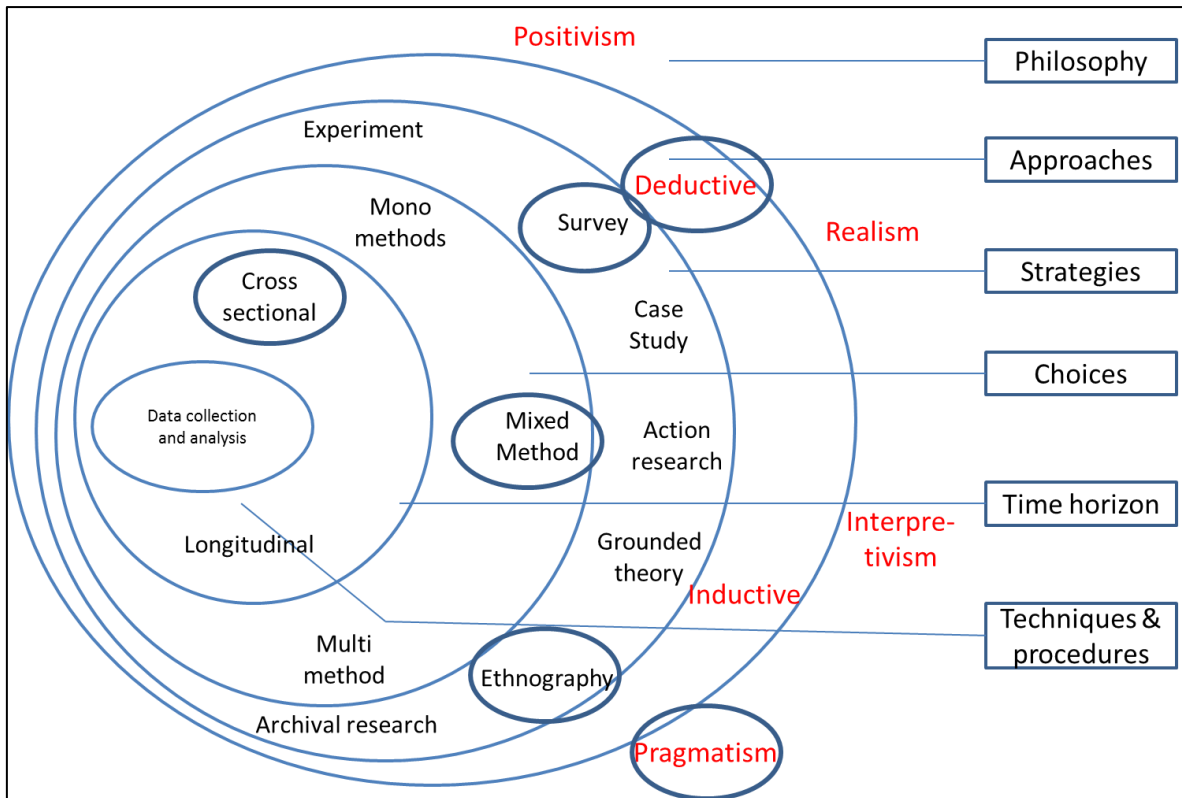


Figure 6.1 The research onion for this study
Source: Saunders, Lewis and Thornhill 2008

6.3.1 Techniques and procedures

The data collection of the study incorporated three distinct data sources: an investigation or survey, a focus group and an expert sustainability review. Each data source had its own data-collection techniques and procedures.

The survey was conducted online, the focus group was conducted face to face and the expert sustainability review was conducted via email. The methodology of each data source is detailed in section 6.3. This approach is similar to the approach used in a study conducted by Karlan (2006) on the South African unsecured lending industry where respondents were pre-screened for inclusion into the study.

The data collected attempts to describe individual variables and the relationship between variables. The results of each data source were analysed to expose explanatory variables that uncover informative trends, themes or connections.

6.3.2. Time horizons

The data collected represents a diverse section of the study population. This research is cross-sectional, meaning that the study is of a particular phenomenon at a particular time (Saunders *et al.* 2009). Cross-sectional studies often employ the survey strategy (Easterby-Smith *et al.* 2008). This allows for a description of the population's behaviour with respect to savings and debt activities, which are the foundation of P2P lending transactions and central to this study. The data were collected from 2013 to 2015.

6.3.3. Choice

Multimethod research was selected as the approach for this study, as it allows for the use of more than one method of data collection (Teddlie & Tashakkori 2012). This allowed the incorporation of data from the four different sources, which are:

- surveys;
- focus groups;
- expert sustainability reviews; and
- an analytical autoethnography study.

These strategies allow for triangulation of different types of data from different sources of data. Triangulation refers to the use of different data-collection techniques within one study in order to ensure that the data are telling you what you think they are telling you (Saunders *et al.* 2009). This study's triangulation approach is similar to the approach used by Dewri *et al.* (2006).

6.3.4. Strategy

The research strategy utilised, according to the research onion, is twofold: a survey and ethnography. The survey strategy is usually associated with the deductive approach, which is a popular and common strategy in business and management research that is most frequently used to answer who, what, where, how much and how many questions, and therefore tends to be used for exploratory and descriptive research (Saunders *et al*, 2009). Ethnography emanates from the field of anthropology; the purpose is to describe and explain the social world the research subjects inhabit in a way in which they would describe and explain it (Saunders *et al*. 2009).

6.3.5. Approaches

A deductive approach, which incorporates developing a theory and hypothesis and a research strategy design to test the hypothesis, was used for this study (Saunders *et al*. 2009).

6.3.6. Philosophy

The study followed the philosophy of pragmatism – a rejection of the idea that the function of thought is to describe, represent or mirror reality. Instead, pragmatists consider thought to be a product of the interaction between an organism and the environment, and therefore a tool for active problem-solving (James 1909). Pragmatism can be explained in the following table:

Table 6.1 Pragmatism explained

Ontology	External, multiple, view chosen to best enable answering of research questions.
Epistemology	Either or both observable and subjective meanings can provide acceptable knowledge dependent upon the research

	question. Focus on practical applied research, integrating different perspectives to help interpret the data.
Axiology	Values play a large role in interpreting results, the researcher adopting both objective and subjective points of view.
Data-collection techniques most often used	Mixed or multiple method designs, quantitative and qualitative.

Source: Saunders *et al.* 2009

6.4. Research design components

The research design aimed to collect data that describes individual savings and debt relationships and in turn answer the research questions. The reason being is that these two activities – individual savings and debt relationships – dictate the level of unsecured lending and the possibility of P2P lending. Savings and debt levels directly influence the sustainability of P2P lending. Yang (1980) states that the purpose of a research design is to accurately assess the cause-and-effect relationships between independent and dependant variables. In this study, the independent variables are savings and debt activities, and dependent variables are lending and borrowing activities in a P2P transaction.

Bryman and Bell (2011) define a research design as a framework that collects and analyses data. The research design in this study specifically addresses the research questions posed in Chapter 1 of this study, and describes relationships between participants in an unsecured lending transaction. The researcher is aware and acknowledges his own values, beliefs and perceptions of the sustainability of P2P lending. As these variables may have influenced the collection of data as well

as the presentation of the research, the researcher followed a structured approach to data collection and presentation.

The mixed method research is used in this study to uncover the insights of respondents via their lived experiences, as savings, debt, lending and borrowing are lived experiences. Mixed method research uses quantitative and qualitative data-collection techniques and analysis procedures either at the same time (parallel) or one after the other (sequential) but does not combine them (Saunders *et al.* 2009). The collected data were generalised into independent themes that were analysed separately and then in conjunction with other themes. Mixed method research is a kind of insurance policy against drawing limited conclusions from one method only (Ngulube & Ngulube 2014). Besides its ability to provide a comprehensive picture and a rich insight into a phenomenon, mixed method research provides a potential for theory building. Because of various factors such as the use of mixed method research, the discipline of economic and management sciences is rapidly changing (Ngulube & Ngulube 2014).

The data collection process was split into two: an online survey and two focus groups. The survey strategy allows one to collect quantitative data that can be analysed quantitatively using descriptive and inferential statistics (Saunders *et al.* 2009). The online survey used in this study collected a large base of information from respondents in order to obtain a large amount of general data relating to credit usage, savings, lending and borrowing that could be used to uncover a number of themes. Questionnaires were sent via social media or emailed to the target respondent. The significant advantage of this questionnaire method is that respondents in a wider geographical area can be reached (Blumberg & Schidler 2008). Predefined criteria were applied so that only legitimate respondents could take part in the survey. Alongside the filtering of potential respondents, there was an element of self-selection by respondents when they were asked only to take part in the survey if they met the list of criteria detailed on the first page of the survey.

A focus group is a group interview that focuses clearly upon a particular issue, product, service or topic and encompasses the need for interactive discussion among participants (Carson *et al.* 2001). The focus groups' investigation took the form of a structured discussion that aimed to investigate specific themes that were uncovered after analysing the insights derived from the surveys. Through the surveys, the researcher was able to identify and validate the themes that emerged from the literature, which required specific attention through focus group discussions. The focus group participants did not participate in the survey, and the two focus groups were distinct from each other. Participants were selected because they have certain characteristics in common that relate to the topic being discussed (Kruger & Casey 2000). This will be discussed thoroughly in the research methodology relating to the focus groups. Table 6.1 defines the thinking behind the research.

Table 6.2 A summary of the research design components based on the adapted design description of Yin (2003)

Component	Description
Research problem	Traditional unsecured lending in South Africa is unsustainable in its current form. Alternatives are required to make the unsecured lending industry sustainable
Research question	Is P2P lending a sustainable alternative to unsecured lending?
Research aim	Research the unsecured lending market and understand the status of P2P lending in South Africa
Context	Unsecured credit market in South Africa
Propositions	<ol style="list-style-type: none"> 1. Does peer pressure result in lower levels of moral hazard and default? 2. When lenders and borrowers perform behavioural underwriting, does this result in fewer instances of adverse selection and lower cost of credit? 3. To what extent are peer pressure and behavioural underwriting present in P2P lending versus

	<p>traditional unsecured lending?</p> <p>4. What are the disadvantages associated with P2P lending in South Africa derived from this study?</p>
Phenomenon investigated (unit of analysis)	P2P lending
Unit of observation	<ul style="list-style-type: none"> • Narrative study based on the personal experiences of the researcher, focusing on lenders, borrowers and the regulator • Survey of individuals active in savings and unsecured lending transactions (Table 6.2 specifies selection criteria) • Focus groups comprising individuals employed within the South African banking industry • Sustainability review from experts in the field with practical unsecured lending experience.
Research methodology	<ul style="list-style-type: none"> • Autoethnographic Study (A narrative for context) • Survey for descriptive analysis • Focus groups for dialectic inquiry of key issues • Expert panel for framework development
Logic linking the data to the propositions	<p>In an unsustainable lending market, the cost of credit is high, as are the rates of default. The disconnect between the lenders and borrowers adds to associated risks. Acquiring data through surveys and focus groups will inform how lenders and borrowers engage, behave and perceive unsecured lending transactions. The research could lead to a theoretical framework to enhance the sustainability of unsecured lending product offerings and a usable alternative to unsecured lending through P2P lending</p>
Criteria for interpreting the findings	<ul style="list-style-type: none"> • Observable benefits of P2P lending transactions (interest and default rates on loans) • Ease of transaction (technology as an enabler of sustainability, quality of internet access, and degrees of separation)

6.5. Methodology

The research instruments used in the study are detailed in this section, and include an autoethnographic study (a narrative), survey, focus group and expert sustainability review. This section details the approaches to each data collection method.

6.5.1. Antecedent variables

In statistics and social sciences, an antecedent variable is a variable that can help to explain apparent relationships between other variables that are normally in a cause and effect relationship (Keyton 2014).

The antecedent variables of this study are contained in two types of activities of respondents:

- savings; and
- debt activities.

These variables ask the questions: how do individuals approach and conduct the act of saving money, as savings are critical to P2P lending from a supply perspective? And how do individuals utilise and think about debt, as borrowing is equally integral to a P2P lending transaction? Both savings and debt are essential to a sustainable unsecured lending industry and to a functioning P2P lending industry.

6.5.1.1. Antecedent variable 1: Self-reporting on saving activities

The first antecedent variable that was investigated probed respondents' savings activities, such as savings made the frequency of savings, and the return on savings. The purpose of these questions was to understand the level of the participants' financial understanding, their vulnerability to external financial shocks, and their access to formal financial products. These were tested in the survey and focus group stages to understand the respondents' and subjects' savings

activities. The savings variable has an impact on the use of debt funding, and adds a meaningful variable in P2P transactions. The survey, focus groups and sustainability review each have elements that help to investigate the savings antecedent variable.

6.5.1.2. Antecedent variable 2: Self-reporting on debt activities

The second antecedent variable that was investigated probed respondents' debt activities, such as the use of debt, the level of indebtedness, credit-provision choices and the cost of debt funding. The purpose of these questions was to understand respondents' levels of financial understanding, their vulnerability to interest rate shocks, and their access to and use of both formal and informal financial products. These were tested in the survey and focus group stages to understand respondents' and subjects' debt activities. The debt variable has an impact on the use of both formal and informal debt funding, and acts as a meaningful variable in P2P transactions. The survey, focus groups and sustainability review have elements of the debt antecedent variable.

6.5.2. Autoethnographic study (narrative study)

The terms autoethnography and narrative are used interchangeably. A narrative study is an approach to research and writing that seeks to describe and systematically analyse personal experience to understand cultural experience (Ellis 2004).

Ellis and Bochner (2000) advocate autoethnography, defining it as a form of writing that makes the researcher's experience a topic of investigation in its own right, rather than the research seeming as if it has been written from nowhere and by nobody. Autoethnography is an autobiographical genre of writing that displays multiple layers of consciousness, connecting the personal to the cultural. Autoethnographers ask their readers to experience the truth of their stories, and to become co-participants, engaging the storyline morally, emotionally, aesthetically, and intellectually (Porter 2004).

Narratives are not simple representations of thoughts, emotions and behaviours but are constitutive of these very things. Ultimately, narratives can shape what we think, how we behave and what we imagine as possible (Papathomas *et al.* 2015). A narrative allows authors to make sense of personal experiences, and seek to improve our understandings of interrelatedness. It allows the researcher, who has witnessed an event, problem or experience, to testify and validate the meaning of the event, problem or experience.

6.5.2.1. Narrative approach

The narrative approach takes the form of a personal narrative. Personal narratives are stories about researchers – or authors – that view themselves as the phenomenon and write analytical narratives specifically focused on their academic, research and personal lives (Ellis 2004). Although they are a controversial form of autoethnography, personal narratives propose to understand a self or some aspect of a life as it intersects with a cultural context, connects with other participants as co-researchers, and invites readers to enter the author's world and use what they learn there to reflect on, understand and cope with their own lives (Ellis 2004).

6.5.2.2. Narrative data collection

The data used for the narrative study was accumulated through personal experiences during 10 years in the banking and financial services industries. The majority of this time was spent in development and unsecured lending.

Within the development field, the researcher's experiences were largely focused on the deficiency that existed in the lack of financial resources and the yearning for any opportunity to better one's situation.

Within the unsecured lending field, the researcher's experiences were focused on the allocation of financial resources in the form of short-term unsecured loans to the lower-income market segment. This offered the opportunity to visit more than

20 informal settlements across South Africa and work in five other Sub-Saharan countries within the microfinance industry. This collection of data allowed for an in-depth narrative study.

6.5.2.3. Narratives

Personal narratives come from three specific interest groups: borrowers, lenders and government regulators. The interest group is a specific person with a vested interest in the unsecured lending industry, either through participation or regulation. The narratives link to the study's research question through repayment decisions, peer pressure and the behavioural underwriting of borrowers.

The researcher has had direct personal interactions with a number of lenders, borrowers and regulators in South Africa, so the personal narrative allows for a better understanding of the lived experience of lenders, borrowers and regulators within an interconnected world, and provides the opportunity to reflect on and appreciate the complexities of their worlds.

6.5.3. Survey

The survey was administered online to a broad base of respondents. The instrument, attached in Appendix A, was hosted by the online tool SurveyMonkey from July 2013 to August 2013. The survey targeted unimpaired credit-active clients in South Africa with internet access.

6.5.3.1. Population

South Africa has about 20 million credit-registered clients, half of whom have impaired credit histories (NCR 2012). The unimpaired credit-active population – circa 10 million clients – represents about 20% of the South Africa population. South Africa has an internet usage of approximately 48.9 percent (World Bank 2014). Assuming the 10 million unimpaired credit-active clients have a

representative internet access proportion, then 4.89 million people represent the universe of possible survey participants.

The population was required to meet specific criteria, detailed in Table 6.2, to participate in the survey. This ensured that only people who would partake in a P2P transaction could take the survey.

6.5.3.2. Sample

Probability sampling (or representative sampling) is most commonly associated with survey-based research strategies where you need to make inferences from your sample about a population to answer your research questions (Saunders *et al.* 2009). Sampling is the selection of some elements from a population (Cooper & Schindler 2003). A structured approach was taken to invite respondents from the population to complete the survey. Potential respondents' email addresses were collected from social networks, friends, work colleagues and fellow students. A total sample of 4 500 contacts was assembled and exported to Microsoft Excel. Of this database, 3 115 contacts passed an initial screening process (see Table 6.2).

The initial screening process consisted of sorting through the preliminary database and excluding individuals who currently lived or worked outside South Africa or were not South African citizens. A total sample of 1 121 respondents completed the online survey over the two-month period representing a 35.98% response rate. Working with a 95% confidence level, the population of 4.89 million and a response rate of 1 121 meant there was approximately a 3% margin of error (Saunders *et al.* 2009). This means that if the sample was selected 100 times, at least 97 of these samples would be certain to represent the characteristics of the population (Saunders *et al.* 2009).

The rationale for selecting the sample size followed the same rationale used in Dewri, Islam and Saha (2016), and their rationale was informed by Islam *et al.* (2013) and Noser *et al.* (2003).

The survey asked 15 questions aimed at lenders and 15 questions aimed at borrowers. Within P2P lending, a lender can also be a borrower and vice versa (a lender can contribute R100 to 10 different loans, but at the same time take out a loan for R5 000). The overlap between lenders and borrowers was an interesting prospect to investigate, as a result, all 1 121 respondents were required to complete both the lender and borrower question sets.

6.5.3.3. Sample criteria

Table 6.2 shows the criteria used to prequalify respondents for the survey. The criteria used to select survey respondents were assembled as a filter, so that only South African credit clients would be allowed to take the survey. This was done to increase the quality of responses. The criteria used were:

- Respondents had to be 18 years of age or older, as 18 is the minimum legal contracting age in South Africa.
- Respondents needed to be South African residents. This was added to the criteria as non-South African residents in South Africa tend to experience difficulties in obtaining credit, and their responses would have skewed the data.
- Respondents also needed to be credit active in South Africa in any respect. This included mortgages, vehicle and asset finance, personal loans, overdrafts, and credit card debt.
- Respondents needed to be employed for the past three months, earning a salary or wage of at least R3 000 a month, and hold a valid South African bank account. These are the basic minimum criteria to qualify for any credit in South Africa.

The study performed an initial filter (as already described), and successful respondents were asked to self-select their eligibility to the study by providing them with the criteria to judge whether they fit into the criteria for the target sample of the study.

Table 6.3 Summary of the criteria used in selecting respondents to participate in the survey

	Surveys
Population	Credit-active customers with internet access in South Africa (creditworthy customers). Approximate population size is 4.89 million people.
Target sample size	1 000
Type of research	Mixed method – both qualitative and quantitative
Sample qualifications	<ol style="list-style-type: none"> 1. Aged above 18 2. Credit active in South Africa 3. South African citizen 4. Employed for more than three months 5. Earn a salary of at least R3 000 a month 6. Hold a valid South African bank account

6.5.3.4. Sample pilot phase for survey

In order to test the validity and reliability of the survey, a pilot test was conducted. The purpose of the pilot test is to refine the questionnaire, so that respondents will have no problem in answering the questions and there will be no issues with recording the data (Saunders *et al.* 2009). A pilot survey was conducted and sent out to 25 individuals to complete and give feedback on the questions and process before the invitation email was sent out to the entire qualified database. Fink (2003) suggests that a minimum number for a pilot is 10.

There were two important feedback notes from the pilot group that were incorporated into the survey. A number of questions – namely questions 8, 9, 12 and 26 – needed further clarity and rewording, as pilot respondents felt they were ambiguous. Also, the pilot survey contained questions that collected demographic data about respondents. More than 90% of the pilot respondents said that they were not comfortable completing the demographic data about themselves as the questions concerned their saving and borrowing activities. The demographic data collection questions that were an issue for respondents pertained to name, surname, race, gender and age. Respondents felt strongly about this and requested that all demographic questions be removed before they completed the survey. Therefore, the only way to obtain data for the study was to exclude all demographic questions about respondents from the questionnaire. The survey was reworked and sent back to the same 25 individuals, who completed it with a higher level of satisfaction and clarity.

6.5.3.5. Sample method of data collection

After the pilot phase, qualifying respondents were invited via email to complete the survey. Social networks utilised to garner support to take the survey included LinkedIn, Facebook and Twitter. Table 6.4 shows the email that was sent to individuals inviting them to participate in the survey.

Table 6.4 Copy of the email sent to survey respondents

Dear colleague or LinkedIn connection,

As part of my PhD research into unsecured lending in South Africa, I have constructed a short survey in which I humbly ask for your participation. The survey aims to gauge individuals' views and insights on unsecured debt in South Africa, as well as lending and borrowing preferences.

The minimum criteria for respondents are:

1. Aged above 18
2. Credit active in South Africa
3. South African citizen
4. Employed for more than three months
5. Earn a salary of at least R3 000 a month
6. Hold a valid South African bank account

If you meet the above criteria, please copy and paste the following link into your browser: <https://www.surveymonkey.com/s/shanesPHDresearch>

This will link you to the online survey. Your privacy is ensured in that returned data has no bearing on respondents' personal information.

Thank you in advance for your insights and views.

Shane Lavagna-Slater

Email address: shane.lavagnaslater@gmail.com

Mobile number: 082 906 0535

6.5.3.6 Sample data analysis process

The survey was closed after two months. The data was exported from SurveyMonkey and saved on a password-protected external hard drive for security reasons. Each question was first analysed individually and then in conjunction with all the other data to uncover insights, interrelationships, themes and trends. This was done through SurveyMonkey's data-extraction techniques, as well as through the aid of an independent statistical analysis expert. This is expanded on in the next chapter. The themes and trends were then transferred and investigated further in the focus group discussions.

6.5.4 Focus group

Focus group methodology can be traced back to Emory Bogardus, who in 1926 described group interviews in his social psychological research to develop social distance scale (Wilkinson 2004). At the simplest level, a focus group is an informal discussion among a group of selected individuals about a particular topic (Wilkinson 2004). This informally led but structured discussion delivers a wide range of opinions and perceptions. The term focus group is used to refer to those group interviews where the topic is defined clearly and precisely and there is a focus on recording the interactive discussion between participants (Carson *et al.* 2001).

Focus groups have started to gain popularity in research relating to different social groups, and in cross-cultural and development research. The main argument for using them in this context is their collective nature, which may suit people who cannot articulate their thoughts easily and thus provide collective power to marginalised people (Liamputtong 2011). This was beneficial to the study, as it allowed deep investigation into the thoughts of all respondents.

The decision to incorporate a focus group into the study was twofold. Firstly, it was a useful tool to research the trends uncovered from the survey and understand them in more depth, and, secondly, it was used to validate P2P concepts with

banking professionals who understand lending and borrowing intimately. Banking professionals have a different perspective that allows insights into specific banking problems, as P2P lending essentially involves outsourcing and crowdsourcing banking activities.

The collective nature of the discussion on unsecured lending was required to further the investigation into P2P lending in South Africa and to determine whether it might be a sustainable alternative to traditional unsecured lending.

6.5.4.1. Population

The population for the focus group study consisted of credit-active customers, but excluded the 1 121 individuals who completed the survey in an attempt to validate the findings from different sources. It was critical to separate the survey and focus group respondents to get independent and uninfluenced feedback. The survey groups identified key themes and insights, and the focus groups allowed the researcher to delve into these themes in detail. The focus group aimed to investigate specific themes that emerged from the survey with individuals who had not been exposed to the survey. This added further credibility, validity and strength to the study's findings.

6.5.4.2. Sample

The focus groups were asked specific discussion questions – which originated from the findings of the survey – to stimulate conversations regarding lending and borrowing. The focus group consisted of 51 subjects in two separate sessions that were administered in August 2014. The subjects were selected from banking professionals to test in-depth lending and borrowing practices. This was not a bias but a validity test against a professional expert group. As Krueger and Casey (2000) point out, participants – as was the case for the focus groups – are selected because they have certain characteristics in common that relate to the topic being discussed and they are encouraged to discuss and share this point of view without any pressure to reach a consensus.

6.5.4.3. Sample criteria

Focus group subjects were initially screened to ensure attendees were able to contribute meaningfully. The minimum criteria are listed in Table 6.5.

Table 6.5 Summary of the criteria used to select subjects to participate in the focus groups

	Focus group
Population	Credit-active customers who work in the banking industry in South Africa, excluding individuals who participated in the online survey. This is a validation against an expert group of banking professionals.
Sample size	50
Type of research	Qualitative
Sample qualifications	<ol style="list-style-type: none"> 1. Aged above 18 2. Credit active in South Africa 3. South African citizen 4. Employed for more than three months at a banking institution in South Africa 5. Earn a salary of at least R3 000 a month 6. Hold a valid South African bank account
Key methods of analysis	Questions generated from the survey were used to better understand the findings of the survey and identify new issues.

A sample of 51 subjects was drawn from the banking industry. Given the professional bankers' experience, their responses meant the data could act as a test of whether P2P lending could actually provide a sustainable alternative to unsecured lending in South Africa.

Once the subjects had passed the minimum criteria, they were invited to join one of the two focus groups. The first group consisted of 12 subjects and the second 39. The difference in number between the groups was a result of scheduling and calendar constraints. The objective was to have two focus groups of 20–25 subjects in each. Thirty-nine subjects may seem too many for a focus group, but each subject gave verbal and written feedback that allowed for them to contribute to the conversation. Each one of the focus group subjects were what Krueger and Casey (2000) claim to be “information rich and highly beneficial to the study”. In order to maximise the focus group subjects, feedback and avoid dominant personalities from over-powering the discussion and participants who publicly agree but privately disagree, each subject was given an individual feedback sheet to note their private answers (Stokes & Bergi, 2006).

6.5.4.4. Sample pilot phase for focus groups

The discussion points were reviewed by five subjects who were unrelated to the study and were not part of the 51 focus group subjects. Important feedback was obtained from the pilot phase on clarity around some of the discussion points and how these could be incorporated into the focus groups.

The researcher asked the pilot group about the use of questions to collect demographic data. The response was that the subjects within a focus group felt more comfortable in disclosing this information as there was face-to-face contact with the researcher. Demographic data-collection questions were added to the written answer sheets.

6.5.4.5. Sample method of data collection

The focus group approach was influenced by Hill and Jones (2011). Two techniques that are known to enhance strategic thinking and counteract groupthink and cognitive biases are devil's advocacy and dialectic inquiry. Devil's advocacy requires the generation of both a plan and a critical analysis of the plan. Dialectic inquiry is more complex, as it requires the generation of a plan (thesis) and a counterplan (antithesis) that reflect plausible but conflicting courses of action (Hill & Jones 2011). The researcher played devil's advocate to the consensus opinions of the focus group, and also made use of elements from dialectic inquiry, which aimed to uncover the realities of the focus group through interrogating competing ideas, perspectives and arguments. Generally speaking, dialectic is a mode of thought, or a philosophic medium, through which contradiction becomes a starting point (rather than a dead end) for contemplation (O'Connor 2003). Dialectical research can be seen as a form of exploratory research that works to precipitate fresh knowledge and awareness.

The focus groups were invited into a classroom-style venue with seating arranged in a U-shape to encourage conversation and engagement. The researcher led the focus groups by introducing the study, providing a brief background and stating the aims of the focus group, which were to try to understand and investigate:

1. lending and degrees of separation;
2. interest and degrees of separation;
3. variables in lending;
4. interest charges and variables in lending;
5. borrower preferences; and
6. peer pressure.

These themes directly contribute to answering the research questions, specifically the concepts of peer pressure, behavioural underwriting, moral hazard and adverse selection.

The focus group discussion prompts, included in Appendix B of this study, were used to direct and stimulate conversation. These discussion points are probing questions used to explore responses that are of significance to the research topic (Saunders *et al.* 2009).

The first part of the discussion focused on the lending activities and the first two items from the list above were tested. The focus groups were asked two questions regarding lending to people within a specific degree of separation. Figure 6.2 was used to illustrate the degrees of separation between themselves, the lender and the borrower to the focus group participants. To explain Figure 6.2 in more detail, the number 1 represents a friend of the focus group subject; number 2 represents a friend of a friend, and so on till number 6. Each number represents a degree of separation from the focus group subject.

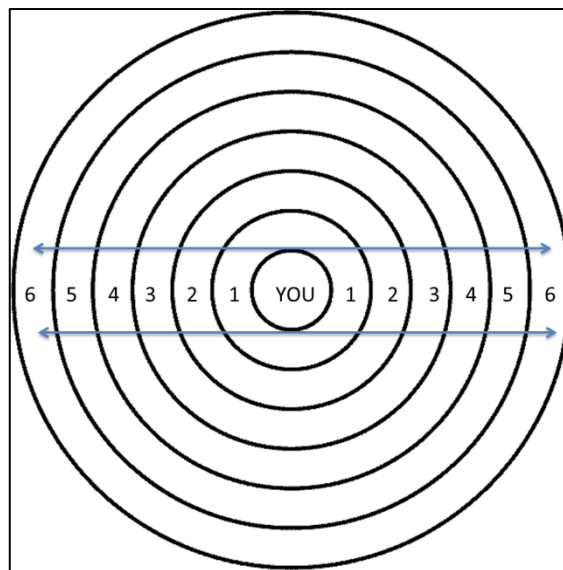


Figure 6.2. Illustration of the six degrees of separation theory used in the focus groups

Source: Own compilation

The focus groups were asked two questions for every degree of separation:

- Would you lend to an individual within this degree of separation?
- If so, what interest rate would you charge?

During these sessions, the risks involved in lending to individuals, as well as an interesting point on the required returns, were discussed and debated. These are detailed in Chapter 8.

The attention then turned to the third theme: variables in the lending process. Subjects were asked to discuss specific variables that could affect their lending decisions, directly probing the research questions relating to peer pressure and behavioural underwriting for answers.

The fourth theme looked at interest charges and variables in lending. Subjects were asked to discuss how the variables they identified in the lending process affected their decision on the interest rates they would charge. This is relevant to the research questions of the sustainability of P2P lending and its applicability in South Africa as an alternative to traditional unsecured lending.

The themes of borrower preferences and peer pressure introduced an intriguing twist to the focus groups. Subjects were asked to change their mindsets from being a lender to a borrower in a P2P transaction; this provided meaningful contributions to the focus groups from the borrower's perspective.

Throughout the focus groups, subjects were asked to make individual notes on the answer sheets provided. This allowed subjects to contribute to the discussion as well as make notes on their individual preferences, answers, ideas and insights. This was important, as there were a number of stronger personalities who attempted to control the conversation and discussion, and individual answer sheets allowed each subject to contribute rich information to the focus group. An answer sheet example is included in Appendix B. The answer sheet acted as a backup to the researcher's notes of the discussion.

6.5.4.6. Sample data analysis process

After each focus group had been concluded, the individual answer sheets and researcher's notes were collected and collated onto a password-protected Microsoft Excel spreadsheet, and saved on a password-protected external hard

drive for security reasons. Each discussion point was first analysed individually and then in conjunction with all the other data to uncover insights, interrelationships, themes and trends through statistical analysis by the researcher and an independent statistical analysis expert. This study employed a Chi-Squared test application similar to that used in Odi *et al* (2005).

6.5.5. Sustainability review

The circles of sustainability framework were adapted in order to assess the unsecured lending industry in South Africa. Five experts were asked to complete a review of the unsecured lending industry in South Africa using the adapted framework.

The sustainability review acted as a corroboration and further triangulation of the survey and focus group data. This is important, as it authenticated and corroborated findings from other data sources.

The approach with respect to the sustainability review followed the following steps:

- Understanding sustainability models
- Adapting the most appropriate sustainability model to assess the unsecured lending industry in South Africa
- Researcher's assessment of the unsecured lending industry in South Africa
- Expert assessment of the unsecured lending industry in South Africa
- Review of the differences, if any, between assessments

The insight from this data directly answers the research question pertaining to the comparison of P2P lending with traditional unsecured lending. Expert analysis allows insights into the sustainability of the current unsecured lending industry.

6.5.5.1. Adapted circles of sustainability assessment

The adapted circles of sustainability model assessment followed a two-pronged approach. Firstly, the researcher provided his assessment based on practical

experience. Secondly, the researcher collected assessments (expert reviews of the adapted circles of sustainability framework) from five unsecured lending practitioners, expert professionals who work in the unsecured lending industry in South Africa.

The differences in the assessments were not meaningful and varied only slightly. The average of the six assessments was then used as the ruling assessment in the adapted circles of sustainability model.

6.6. Data analysis procedures

Data were collected from the survey, focus groups and expert sustainability review, and an analysis was performed. The data were collated into categories, frequencies and attempts to summarise the sample, and were organised using various tools. Below is a comprehensive list of the available formats of data collection points.

Narratives

1. Lenders
2. Borrowers
3. Regulators

Survey

1. Answers to each of the 30 individual questions, including other responses (electronic copies)
2. Answers to each of the 30 individual questions and their links to all other survey questions to establish relationships (electronic copies)
3. Summary data of entire survey (electronic copy)
4. Full email database used to invite individuals to complete the survey (electronic copy)
5. Microsoft Excel spreadsheet of raw data, time-stamped with IP addresses (electronic copy)

Focus group

1. Completed individual answer sheets (hard copy)
2. Microsoft Excel spreadsheet of aggregated individual answer sheet data (electronic copy)
3. Facilitation notes taken during the focus group discussions (hard copy)

Adapted circles of sustainability assessments

1. Five completed adapted circles of sustainability expert reviews (electronic copy)

6.7. Data analysis

The data analysis revolved around the antecedent variables of the respondents' savings and debt activities. These are the types of data collected that explain the variables.

6.7.1. Antecedent variable 1: Savings activities

In an attempt to collect data to explain the savings variable (actual or current saving of disposable income), the data collected hoped to answer the following questions:

- Do respondents save each month?
- What is the amount of savings made each month?
- What is the destination of these savings each month?
- What is the return earned on these savings each month?
- Do respondents bank online and therefore are formally banked?
- Do respondents use the internet to conduct financial transactions?
- Do respondents use their savings as loans to family or friends, and, if so, have the recipients of the loans ever defaulted?
- Would respondents consider using their savings as a loan to a stranger, and, if so, what return would encourage them to do this?

- What is the risk appetite of respondents in respect of their savings?

6.7.2. Antecedent variable 2: Debt activities

In an attempt to collect data that explains the debt variable (use of debt or credit in any form), the data collected hoped to answer the following questions:

- What types of debt products do respondents use, and what do they use the loans for?
- What influences their choice of credit provider?
- Have respondents used the internet to take out a loan?
- Would respondents consider taking out a loan from an individual instead of a credit provider?
- What are respondents' concerns about the interest rate when taking out a debt product?
- Why would respondents switch from higher-interest products to lower-interest products?
- Would respondents take out loans from family and friends?
- What different performance pressures relate to loans from different sources?
- What is the debt and repayment level of the respondents?

6.8. Limitations

The survey, focus groups and sustainability review were available only in English as this allowed for the necessary interpretation by the researcher. However, English may have not been the first language of many respondents, and therefore there may have been challenges in understanding various questions in the three data sources.

The data analysis used descriptive data rather than causal data. This allowed only for the interpretation or description of relationships, and not why they occur.

However, the size of both the survey (1 121) and the focus groups (51) provides for an in-depth description of the relationships and the savings and debt variables.

6.9. Ethical considerations

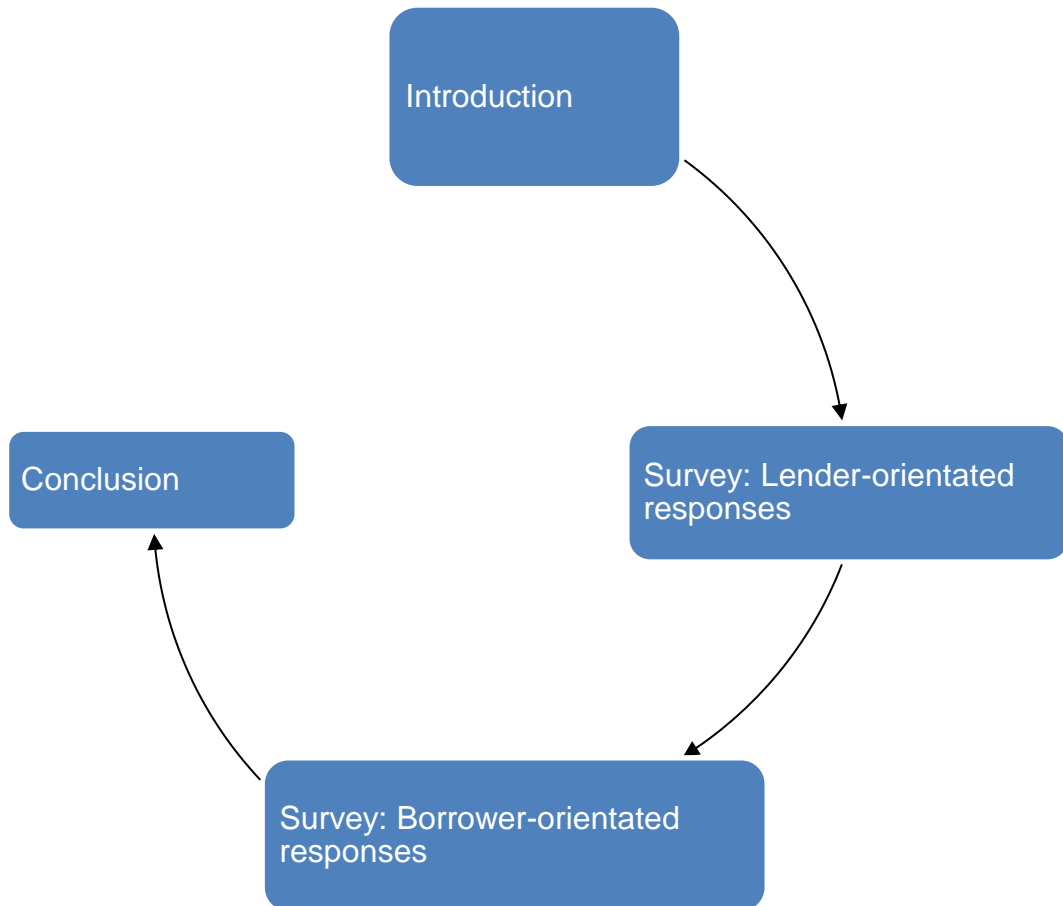
The ethical considerations of the study focused on the confidentiality of responses from subjects, and noted the sensitivity of the topic under investigation. All the necessary encryption, confidentiality and security measures were taken to uphold the ethical standard of this study.

Each respondent and participant was invited to partake in the study and participated voluntarily.

6.10. Conclusion

This chapter discussed the approach to the research methodology and design of the study. The study consists of four distinct data analysis and collection initiatives: a survey, a focus group, a proposed sustainability framework and a narrative study. The next chapter begins the reporting of the survey data and findings.

Chapter 7: Research findings: Survey



7.1. Introduction

This chapter reports the findings of the survey data, followed by a discussion of the findings. The survey findings are reported separately for lender- and borrower-orientated questions and discussion viewpoints. Both sets of questions were answered by all the participants, as individuals are typically considered both deficit and surplus units. All questions of the survey were compulsory and each respondent was required to answer all questions.

In addition, statistical test results are presented in this chapter where deemed necessary. The Chi-Square test for independence was conducted to test the hypothesis that there is a likelihood of variable association. If the probability level was less than 0.05, the hypothesis is rejected, and thus the conclusion would state that the variables are significantly different at a 95% significance level. However, if the probability value were to exceed 0.05, the test would conclude that it failed to reject the hypothesis and that the variables have a likelihood of independence.

The survey findings of lender-orientated questions are discussed in section 7.2 and findings of borrower-orientated questions are discussed in section 7.3.

7.2. Survey: Lender-orientated responses

The first 15 questions of the survey focused on questions that reveal the lending capacity, abilities and inclinations of respondents.

7.2.1. Saving status of respondents

Question 1 focused on the act of saving, and whether the survey respondents consciously and consistently saved each month. Of the 1 121 respondents, 833 (74.3%) stated that they saved every month, with only 220 (19.6%) indicating that they did not save at all.

An interesting insight from the responses labelled “other” (6.1%) was that, generally, people tried to save, but did not manage to do it monthly. Most stated that they were able to save every other month, or every two or three months. Other notable responses stated that at the end of the month, any extra money was put into mortgages or debt repayments in an effort to become debt free. A number of respondents claimed to invest or save money through property purchases, either in their primary residence or in a rental property. One respondent said she saved every month through a stokvel.

The results of this question indicate that most respondents have disposable income to save and invest. This action is a precursor to P2P lending (antecedent variable 1) – it forms the supply of capital or funds to lend to borrowers through a P2P platform.

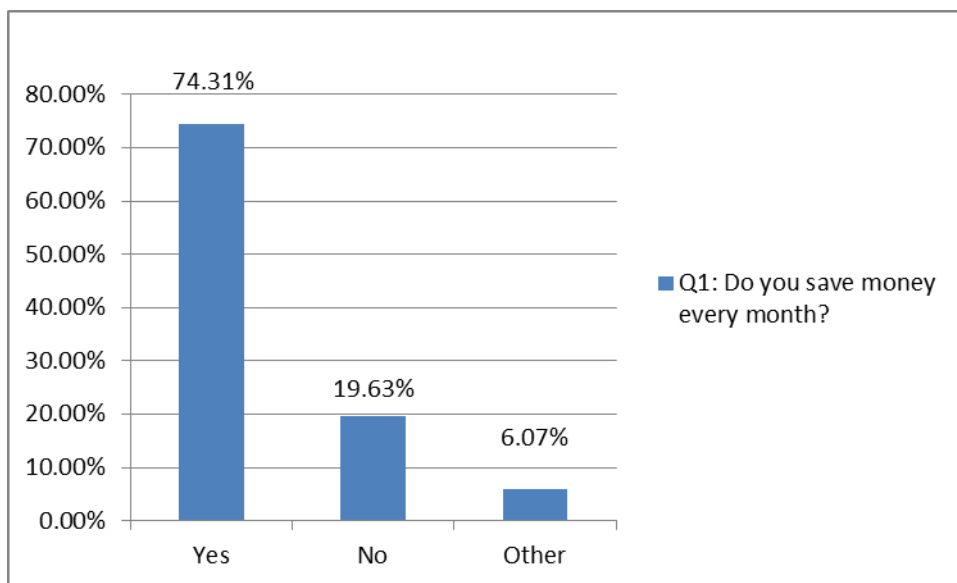


Figure 7.1 Money-saving propensity of respondents

7.2.2. Level of saving by respondents

Question 2 looked at the amount saved each month. The three most selected options showed amounts of between R500 and R2 000 a month are saved by 360 respondents (32.1%); amounts of between R2 000 and R5 000 a month are saved

by 237 respondents (21.1%); and more than R5 000 was saved by 192 respondents (17.1%). Only 122 respondents (10.9%) indicated that they saved less than R500 a month.

Using the average of each option, and the bottom end of the R5 000 or more category as an approximation of the amount saved, the total saved each month by the 1 121 respondents could be almost R2.3 million.

This is a material amount in terms of potential unsecured lending. According to Capitec Bank, in 2012, the average loan size was approximately R4 200. On this basis, the total amount saved could yield about 540 unsecured loans a month.

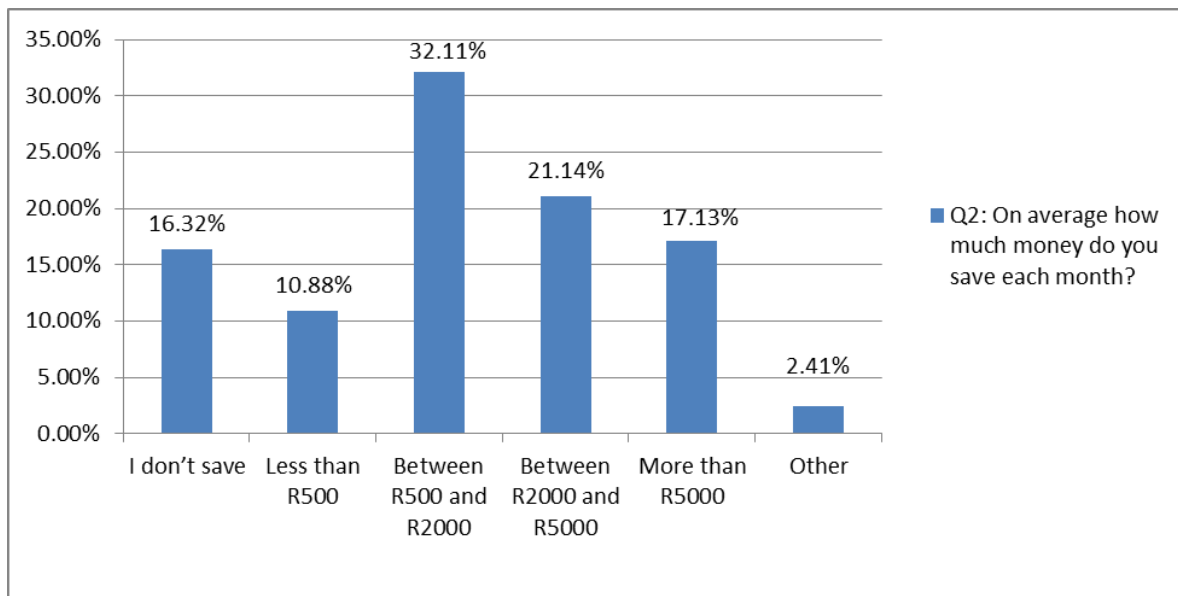


Figure 7.2 Monthly savings level of respondents

The responses in the option labelled “other” yielded mixed results, with a few participants indicating that they save in excess of R10 000 a month, whereas others did not pinpoint a specific monthly amount. Most stated that they saved what was remaining in their bank accounts at the end of the month, if anything. Respondents who selected “other” stated that the amount they saved every month varied based on commissions earned. Most indicated that they saved “as much as [they could] each month after expenses”.

7.2.3. Saving destinations of respondents

Question 3 intended to identify the destination of the savings indicated in the previous two questions.

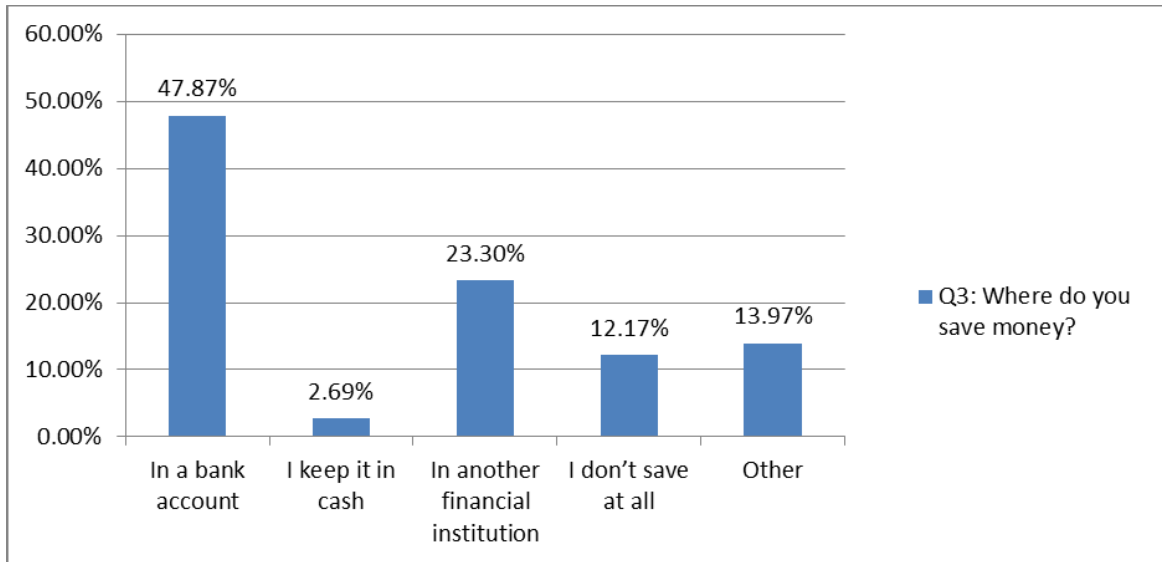


Figure 7.3 Destination of savings by respondents

Surprisingly, 47.9% of the respondents revealed they put their savings into a bank account. This is surprising, because the returns offered by savings or fixed-deposit savings accounts are generally at or lower than inflation. Only 23.3% of respondents stated that they saved with a financial institution other than a bank.

The majority of participants who responded under “other” showed that the money was saved or invested into unit trusts, shares, property (primary and rental), retirement annuities, pension funds, endowment policies, exchange trade funds, Kruger Rands, money market accounts, hedge funds and stokvels.

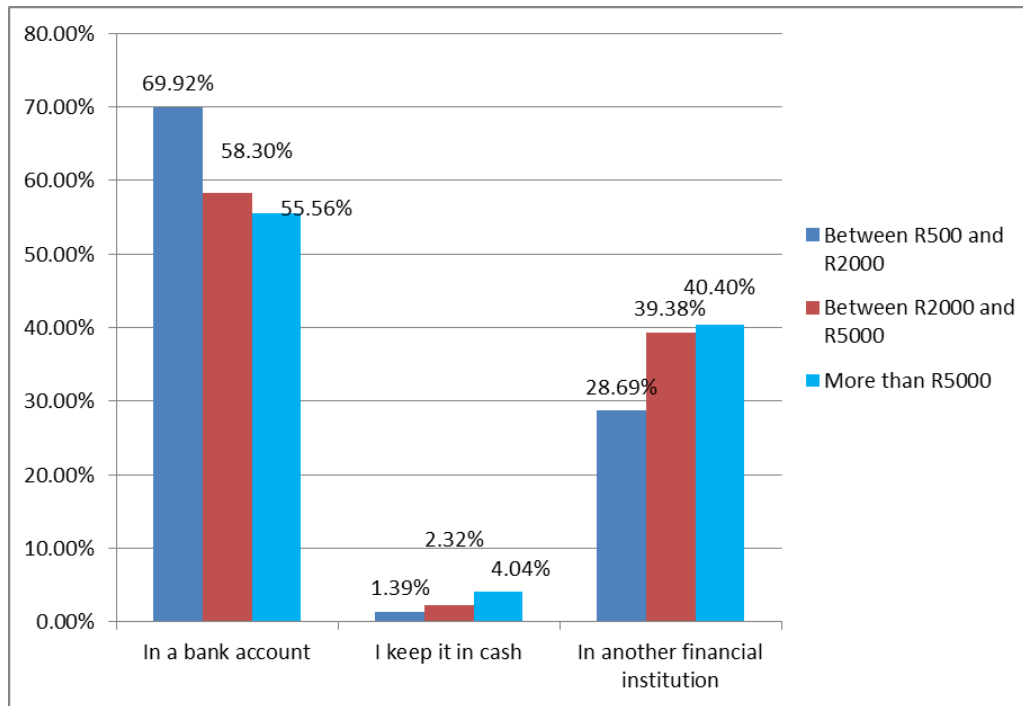


Figure 7.4 Amount and destination of respondents' savings

Figure 7.3 shows that 47.9% of respondents saved into a bank account, but if we cross-reference this against the amount saved, Figure 7.4 yields intriguing insights. Individuals who generally save less each month put their money into bank accounts, but more respondents who saved larger monthly amounts saved with a financial institution. This may suggest that individuals who save a smaller amount each month are either risk averse with their savings, lack access to financial institutions, lack knowledge of financial products or have considered the cost-benefit trade-off not compelling enough.

Individuals who saved a larger amount each month appeared to search for higher yields at other financial institutions and through other investments. There is a diversification of investments away from lower-yield bank savings accounts to higher-yield investments that naturally carry more risk as the stated monthly savings amounts increase. It can be assumed that individuals saving larger amounts each month accept more risk as part of their investment and savings portfolios.

Peer-to-peer lending is predicated on the notion that returns are higher than traditional savings accounts for lenders, and the costs for borrowers are lower than comparable credit at banks. This aligns with the insights gathered from Figures 7.3 and 7.4, which show that individuals searching for higher yields diversify into asset classes that carry higher risk. Peer-to-peer lending could theoretically be included as an asset class for individuals who accept more risk in their portfolios.

7.2.4. Percentage return obtained by respondents

Question 4 focused on the returns earned on the monthly amounts saved. Figure 7.5 shows that the most common response came from the “less than 10%” category, with 523 respondents (46.7%) selecting this option. The next highest was between 10% and 15%, with 197 respondents (17.6%). A number of respondents – 157 (14%) – were not aware of the average return on their savings.

Responses in the “other” category included money saved on the interest expense of a mortgage bond, no interest earned because of Islamic law or religious reasons, and savings kept in cash and therefore without interest.

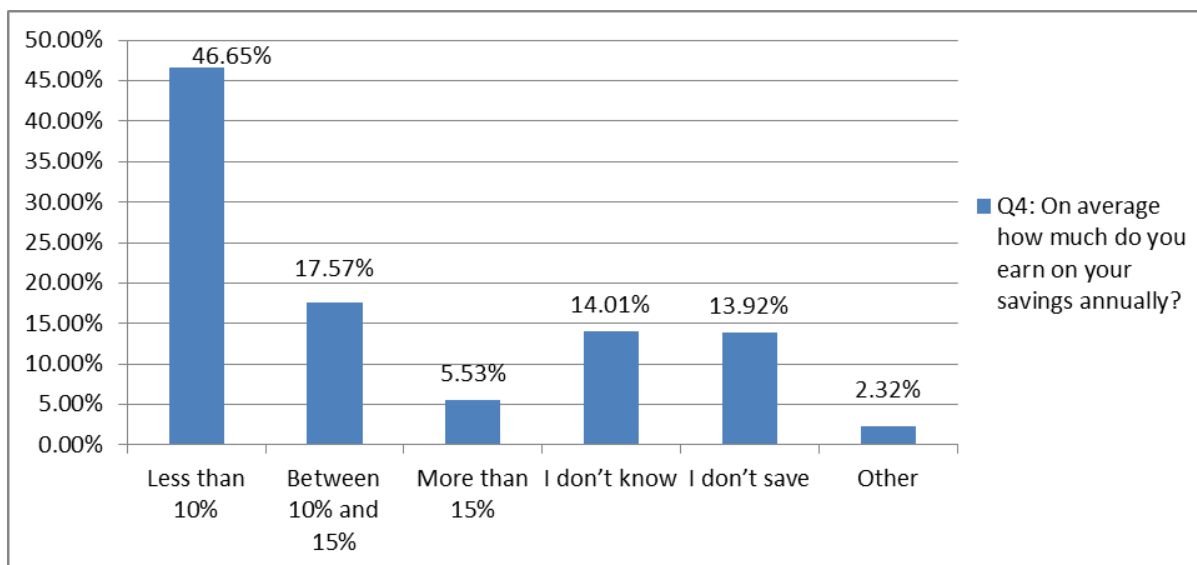


Figure 7.5 Average annual returns on savings

Those who did not know how much interest they earned – 14% – generally saved their money in bank accounts. Figure 7.6 shows where respondents said they saved their money and how much they earned on their savings.

Figure 7.6 reinforces the findings of Question 3: Where do you save money? Respondents who earned a higher return on their savings generally diversified away from savings in a bank account to other investments and financial institutions. Lower-earning bank account savings could be diverted into higher-earning investments.

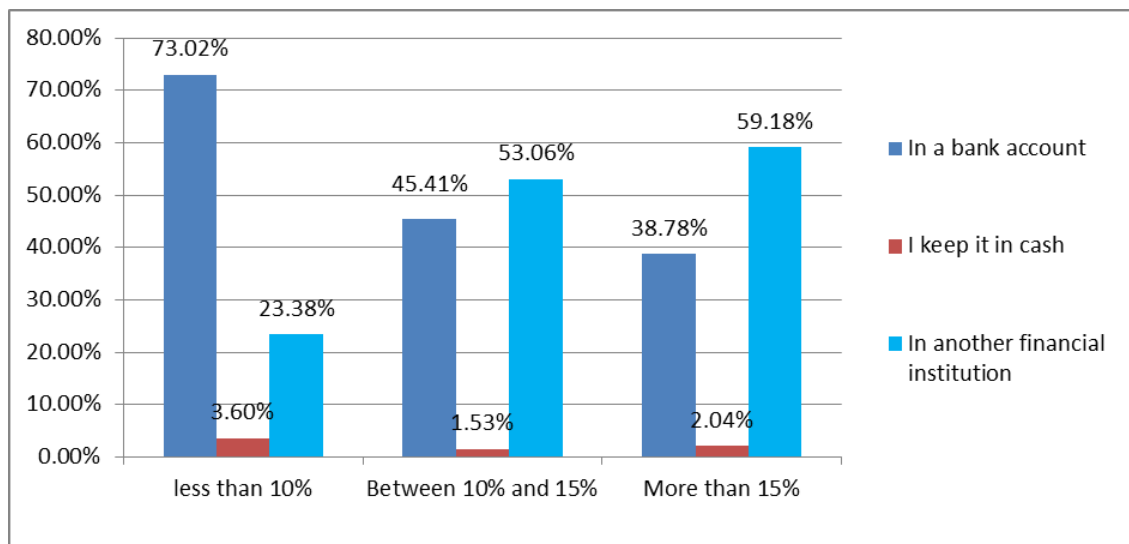


Figure 7.6 Destination and returns earned by respondents

7.2.5. Online banking activity

Question 5 identified the banking channel through which respondents banked or transacted. An overwhelming majority, 1 033 respondents (92.2%), banked online. Only 85 respondents – 7.6% – did not use online banking. The three who responded “other” reported intermittent usage of online banking.

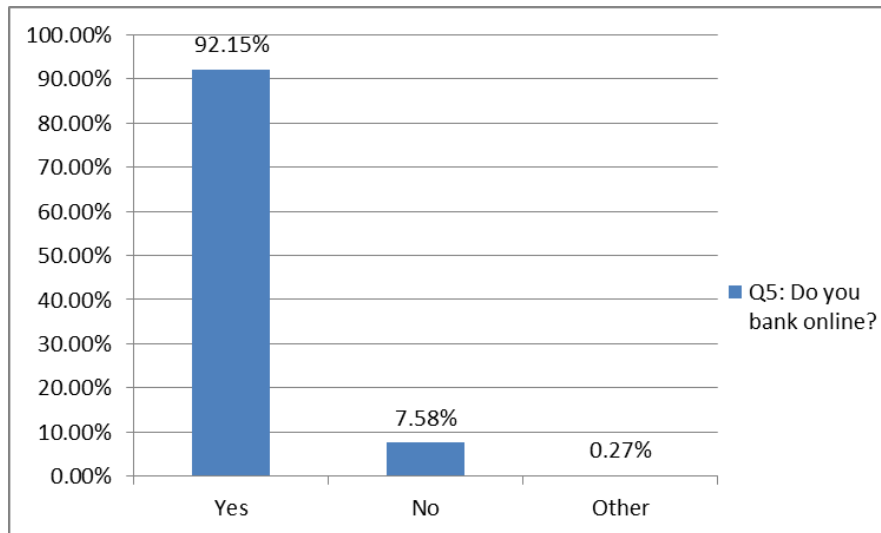


Figure 7.7 Online banking activity of respondents

The majority of respondents reported that they use online banking as a channel to access their bank accounts. These results may be biased as respondents required internet access to complete the survey, however, a minority did not transact online but had internet access.

Online banking is an important consideration in the P2P lending landscape, where the P2P platform is online. Both lenders and borrowers are required to use a secure transaction platform, similar to online banking, to conclude a P2P lending transaction. The majority of respondents use online banking and are comfortable transacting with a trusted and secure banking platform. However, it remains to be seen if these same individuals would use the internet to provide loans to other individuals.

7.2.6. Online activity

Question 6 further investigated the use of the internet to transact, building on Question 5. As much as 80% (899) of respondents indicated that in the past 12 months they had purchased products online, which shows the ease and comfort with which the surveyed group utilises the internet in transacting. The high usage of online transaction platforms, like shopping websites, is encouraging for

P2P lending. These findings may indicate that the use of the internet to transact is not a barrier to P2P lending but the potential bias raised in section 7.2.5 must be noted again.

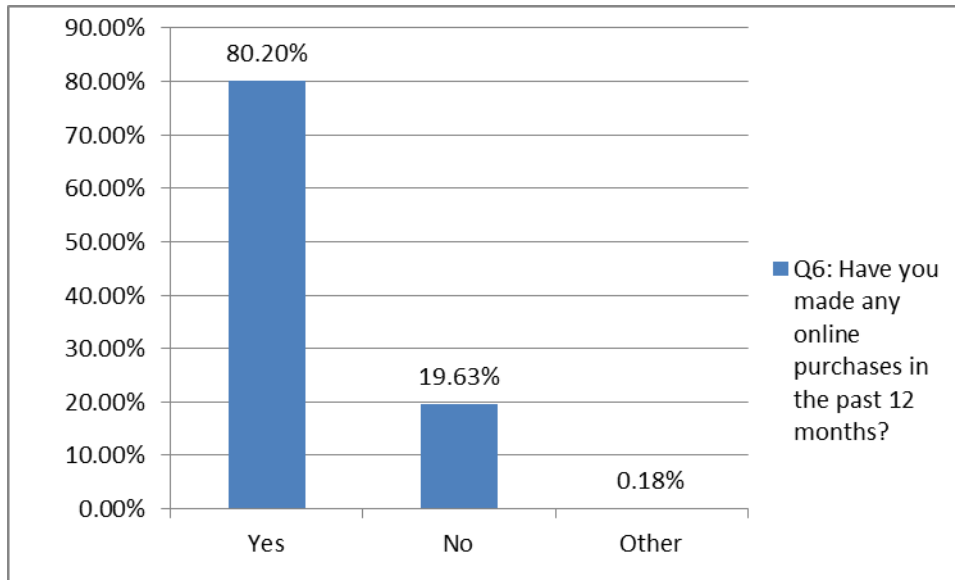


Figure 7.8 Online purchasing activity of respondents

As expected, the correlation between the respondents who bank online and make purchases online is strong. Almost all respondents (97%) who made a purchase online in the past 12 months also bank online. Of those who have purchased a product online in the past 12 months, 29.9% saved between R500 and R2 000 a month, and 22.5% saved between R2 000 and R5 000 a month.

At this point it necessary to introduce the Chi-Square test – a statistical test used to compare expected data with collected data. The Chi-Square test enables one to find out how likely it is that the two variables are associated (Saunders *et al.* 2009). If there is a large difference, there may be something causing a significant change. A significantly large difference will allow an assumption of no interaction between variables. In essence, if there is a large enough difference in scores between the variables, then something significant happened. If the scores are close, then we can conclude that they are basically the same.

Table 7.1 shows the Chi-Square test of the results discussed above. The proportions of how much respondents save and what percentages they earn on savings are significantly different with respect to whether the respondents purchase online or not, with a Chi-Square value of 44.52 ($p = 0.001$) and 13.96 ($p = 0.0158$) respectively.

Table 7.1 Pearson Chi-Square test for online purchases

Pearson Chi-Square Test for Savings			
Variable 1	Variable 2	Chi-Square	Probability
Bank online	Made online purchase	164.7028	0.0001
Money saved each month	Made online purchase	44.5298	0.0001
Earning on savings annually	Made online purchase	13.9679	0.0158

This is an important finding for lenders in a P2P lending transaction, as the respondents are basically the target market for lenders – individuals who are comfortable with transacting online and who save but don't necessarily earn high returns. These funds may constitute target funds to direct towards P2P transactions.

Figure 7.9 shows the cross-view of respondents who have made online purchases and said they bank online. A significant number, 873 (85%), answered positively to buying and banking online.

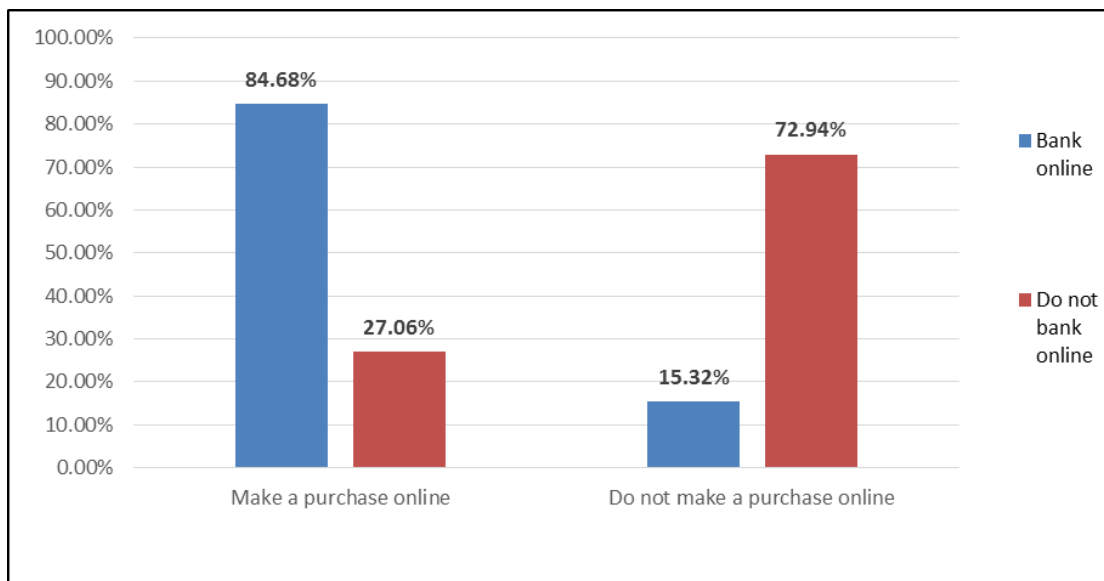


Figure 7.9 Distribution of online purchase for respondents who bank online

These proportions are statistically significant, with a 95% significance level and a Chi-Square value of 164.70 ($p = 0.001$), as shown in Table 7.1. In other words, the proportion of those who bank online is significantly different in terms of whether they have purchased online in the last 12 months or not. The same applies for those who do not bank online.

7.2.7. Lending to family or friends

Question 7 began the investigation into the informal practice of lending and borrowing among individuals by asking if the respondent has ever granted a loan to a family member or friend.

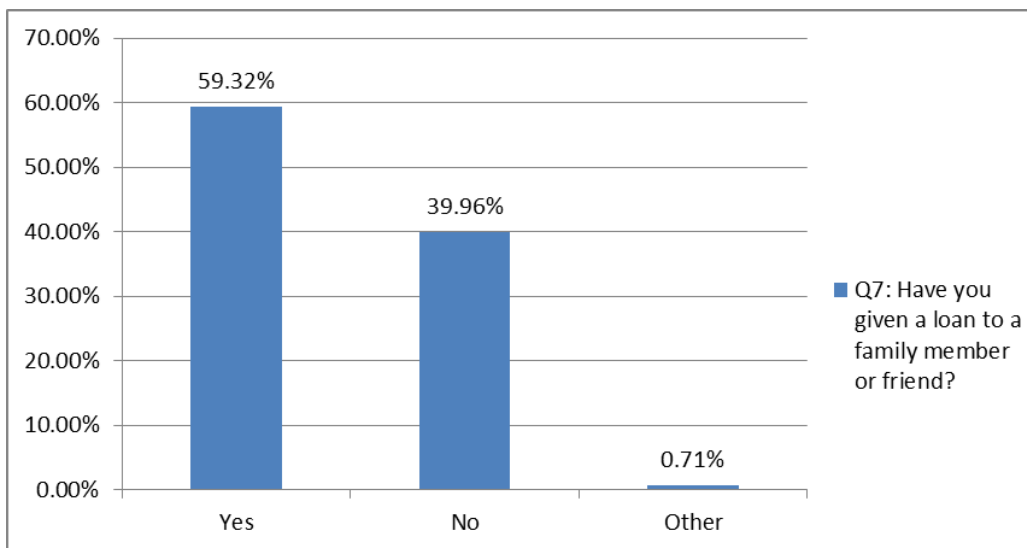


Figure 7.10 Lending history to family and friends by respondents

The majority of respondents, 665 (59.3%), indicated that they had, in the past, given a loan to family or friends, while 448 (40%) indicated they had not. Other responses included purchases of heating equipment that was provided as a loan to family, loans to start-up businesses, and loans to gardeners and domestic workers.

This is evidence that individuals are willing to help others within a close circle through loan provision. This may contribute to the argument that the degree of separation between people may have an influence on P2P transactions. The existence of such a relationship was explored by follow-up questions.

7.2.8. Loan repayment by family and friends

Question 8 investigated the notion that the smaller the degree of separation between people, the lower the default rate. Of the 665 responses discussed in Question 7, 618 respondents reported that their family or friends had never defaulted on their loans.

In other responses, people stated that they had given a loan to a family member or friend as a philanthropic loan (as opposed to a commercial one) without the expectation of interest repayments. This may have inflated the number of respondents who said their family members or friends had defaulted on their loans. This is a valuable insight for P2P transactions – a portion of people who lend money within a close degree of separation may not be driven by commercial interest but by philanthropic intentions.

7.2.9. Lending to strangers

Question 9 further investigated the act of providing loans. The question asked whether the respondents would consider giving loans to strangers if the risk of lending to that person was properly assessed and understood. The word stranger was intentionally used to denote someone outside of the respondent’s close group of family or friends (outside a close degree of separation).

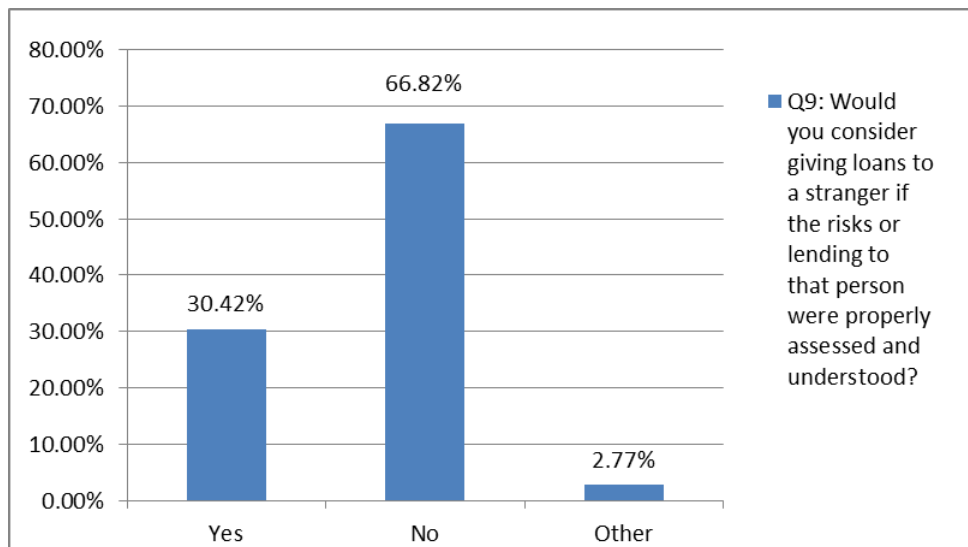


Figure 7.11 Willingness of respondents to lend to strangers

The large majority of respondents, 749 (66.8%), reported they would not lend to a stranger, and 341 (30.4%) said they would. This is an interesting outcome, as it shows that the majority of respondents would give loans to family and friends, but

not to risk-assessed strangers. This points to an increased level of uncertainty as people become further removed by degrees of separation.

Other responses include answers such as: “it depends on the interest rate”; “only if there is a formal contract in place”; “only if the loan was secured against an asset or carried surety”; and “only for loans towards basic needs like education, food and shelter”. One respondent summarised the general theme of all the responses by stating: “It is very risky to give a loan to a stranger rather [than] someone you know and trust.”

Notably, of the respondents who said that they would not give a loan to a stranger, 54% said they had previously given a loan to a family member or friend, and 72% of those who would consider giving a loan to a stranger have previously given a loan to a family member (Figure 7.12).

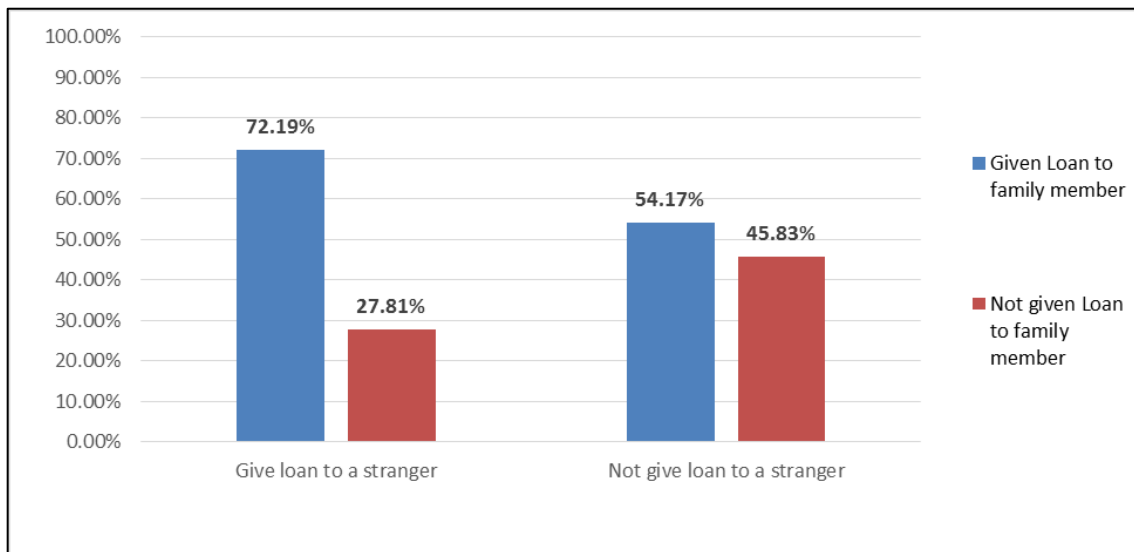


Figure 7.12 Lending to family versus lending to strangers

Table 7.2 Pearson Chi-Square test for lending to strangers who have been risk assessed

Pearson Chi-Square test for lending			
Variable 1	Variable 2	Chi-Square	Probability
Would consider giving a loan to a stranger if the risks were properly assessed and understood	Given a loan to a family member or friend	31.4024	0.0001
Would consider giving a loan to a stranger if the risks were properly assessed and understood	Has a family member or friend ever defaulted or not repaid their loan to you?	11.9258	0.0006

Table 7.2 contains the Chi-Square test results of the cross-view of those who have given a loan to a family member or not and those who would consider giving a loan to a stranger or not. The results are significant, with a Chi-Square value of 31.40

($\rho = 0.0001$), which implies that the proportions of whether to consider giving a loan to a stranger or not are significantly different with respect to whether they have given a loan to a family member or not.

It seems valid to state that the historical positive lending experience of these respondents has not encouraged them to lend to strangers, adding substance to the idea that people place emphasis on both behavioural underwriting and degrees of separation. Respondents would rather lend to people they know and have already subconsciously underwritten using the borrower's behaviour as a proxy for loan performance. The degree of separation adds a definite element of peer pressure in the repayment of loans. The test statistic (Table 7.2) shows that the proportions contained in Figure 7.13 are significantly different, with a Chi-Square value of 11.93 ($\rho = 0.0006$).

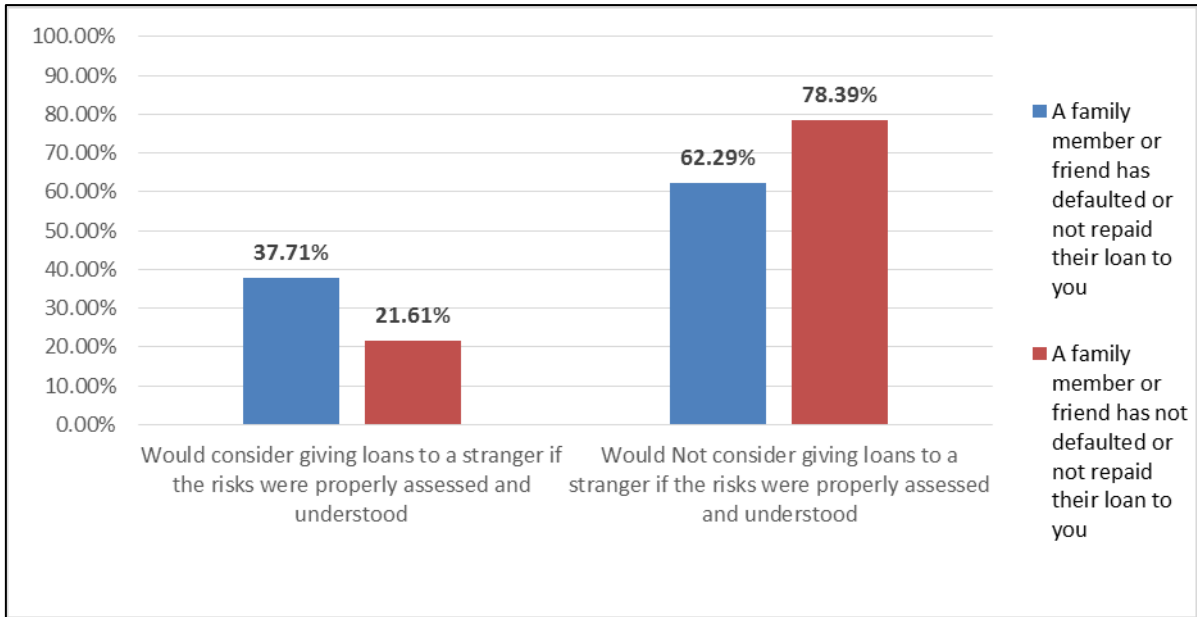


Figure 7.13 Willingness to lend to strangers and default experience of family and friends

Table 7.3 contains all the Chi-Square tests performed in the rest of this section. The results of the investigation into differences in proportions are referred to in this table.

Table 7.3 Pearson Chi-Square test for interest charges and defaults

Pearson Chi-Square test for savings			
Variable 1	Variable 2	Chi-Square	Probability
Earning more than 20% in interest encourages you to lend	Monthly savings	4.9088	0.4271
Earning more than 20% in interest encourages you to lend	Annual earning on savings	13.6241	0.0182
Shared risk of lending	Given a loan to a family member or friend	8.4958	0.0036
Shared risk of lending	Family member or friend ever defaulted	0.1476	0.7008
Shared risk of lending	Would loan to a stranger if the risks were properly assessed and understood	36.6237	0.0001
Shared risk of lending	Would lend to a person who lives outside your province	53.7456	0.0001
Lending to a person of different race or gender	Would loan to a stranger if the risks were properly assessed and understood	77.7353	0.0001
Interest rate charged on a loan	Given a loan to a family member or friend	1.6874	0.6397
Interest rate charged on a loan	Family member or friend ever defaulted	3.3338	0.343
Interest rate charged on a loan	Earning more than 20% in interest encourages you to lend	164.5502	0.0001

7.2.10. Lender preferences on the uses of lent funds

Question 10 investigated whether or not lenders prefer loans to be used for specific purposes. Lenders were asked to consider what they would prefer to provide a loan towards if they were to give one out, and they could select more

than one option. Just more than 58% selected a loan towards education, and 35.7% selected loans towards starting a business. An interesting trend to note is that the loan’s purpose was unimportant for 13.3% of respondents as long as the lender made a return.

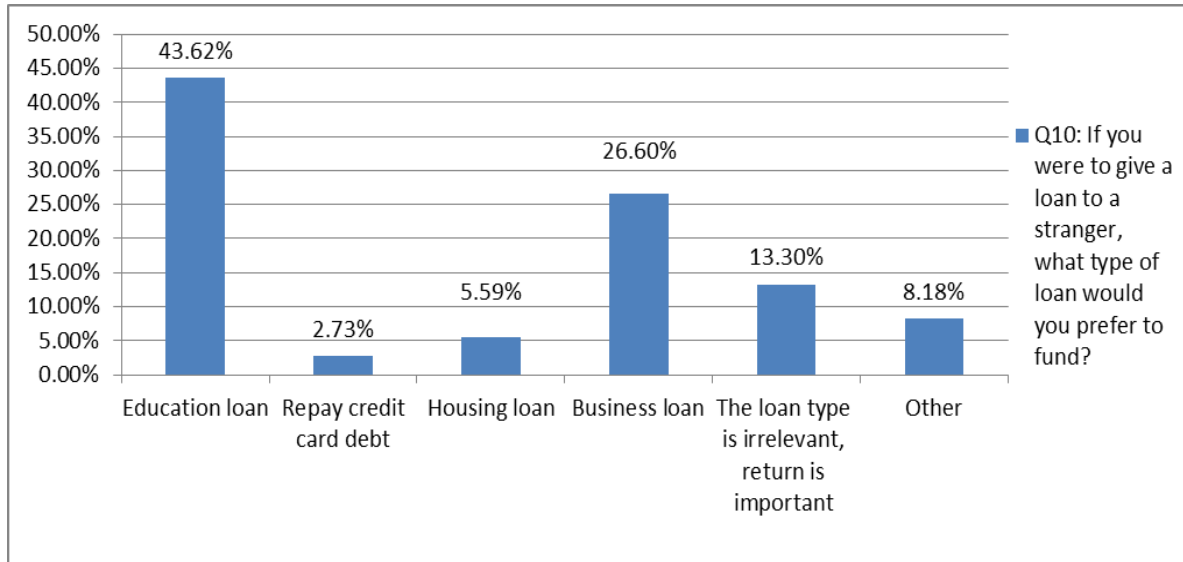


Figure 7.14 Preferences of lenders based on the use of the loan by borrowers

Other responses to this question included: “only in the event of an emergency”; “to help someone purchase food and other daily essentials”; “as long as it was not emergency or consumption driven”; “for poverty eradication”; “depends on what type of education”; “to get out of debt”; “for urgent needs only – I often do it for my domestic worker”; and “for loans that have some sort of asset backing, and very short-term loans of a small amounts”.

7.2.11. Lending-risk-versus-reward relationship

The aim of Question 11 was to ascertain the strength of the risk-versus-reward relationship. The questions thus far focused on savings, internet usage, risk of lending, and degree of separation. Question 11 looked at the rewards of lending, and asked whether lenders would be encouraged to lend money for a return of 20% or more.

Just more than 58% (653) of respondents stated that earning this return would encourage them to lend money, whereas 36.2% (406) said it would not be sufficient incentive. Other respondents declined for religious reasons. One respondent mentioned that a 20% return was too high and therefore unethical, and another commented that individual lending is not driven by the need to earn a return. Some worried that a return of 20% indicated a high level of risk, whereas others wanted a guarantee on the return. A few said they would need more than 20%.

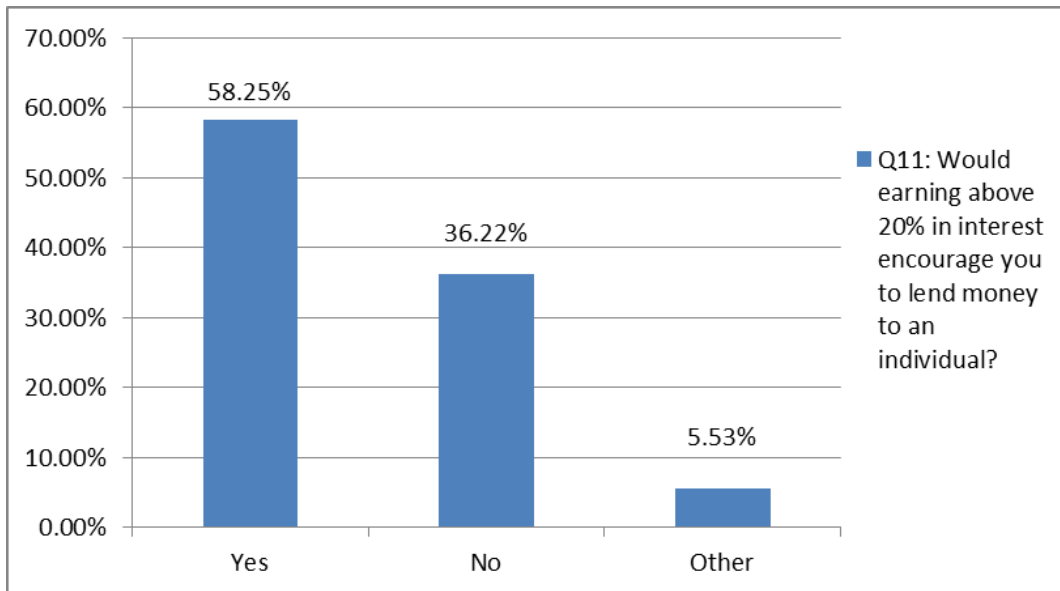


Figure 7.15 High returns as an incentive to lend to individuals

Notably, of the 653 people who answered in the affirmative for high-return requirements, 313 (63.62%) stated that they currently earn a return of less than 10% on their savings, as indicated in Figure 7.16. This is significantly different from those who responded that high returns would not encourage them to lend and are content to earn less than 10% on their savings (36.38%).

Table 7.3 contains the Chi-Square test statistics for all the proportions of earnings on savings with respect to whether earning high returns would encourage respondents to lend. A Chi-Square value of 13.62 ($p = 0.018$) indicates that the

proportions of levels of annual earnings are different with respect to whether earning 20% would encourage respondents to lend.

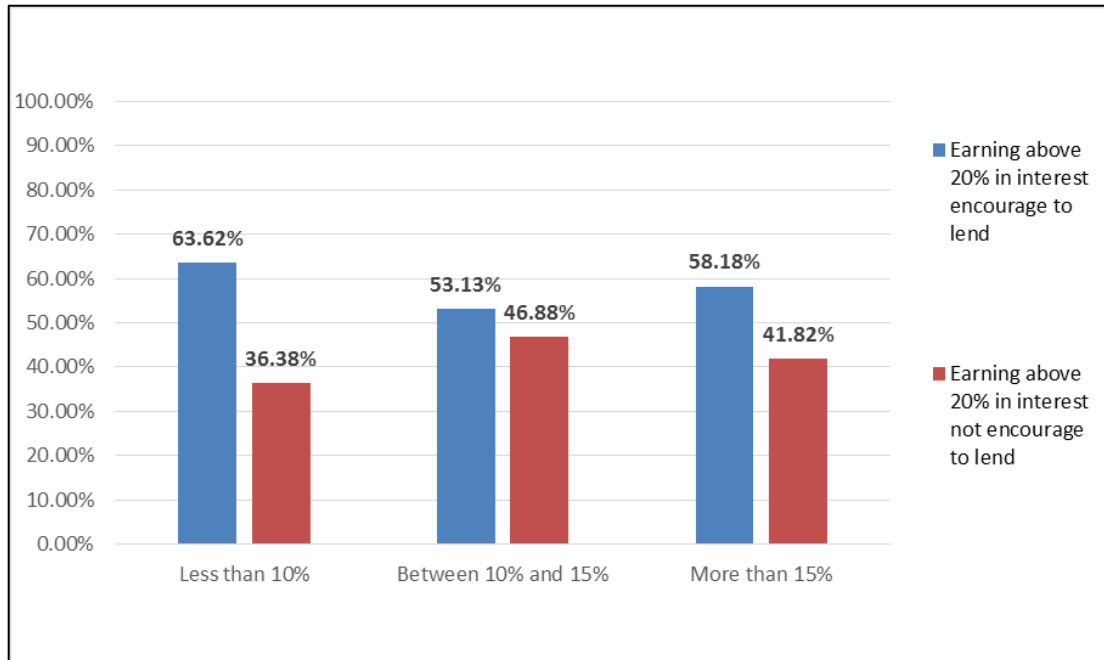


Figure 7.16 Returns on annual savings

Respondents who answered “other” stated that 20% interest was unrealistic and unacceptably high, and that the interest rate would push the borrower closer to default. A number of respondents understood the relationship between risk and return, and felt that the return of more than 20% indicated a high level of risk, which is unwarranted for this type of investment.

7.2.12. Peer-to-peer default risk sharing

Question 12 highlighted specific risk-mitigation techniques within P2P lending – sharing the risk of default over a number of lenders. One of the founding principles of P2P lending is that risk is shared and spread over a number of lenders. Individual lenders share in the returns of a number of different loans. Respondents were asked if they would be more comfortable participating in a P2P loan with nine other lenders, each contributing R100 to a R1 000 loan.

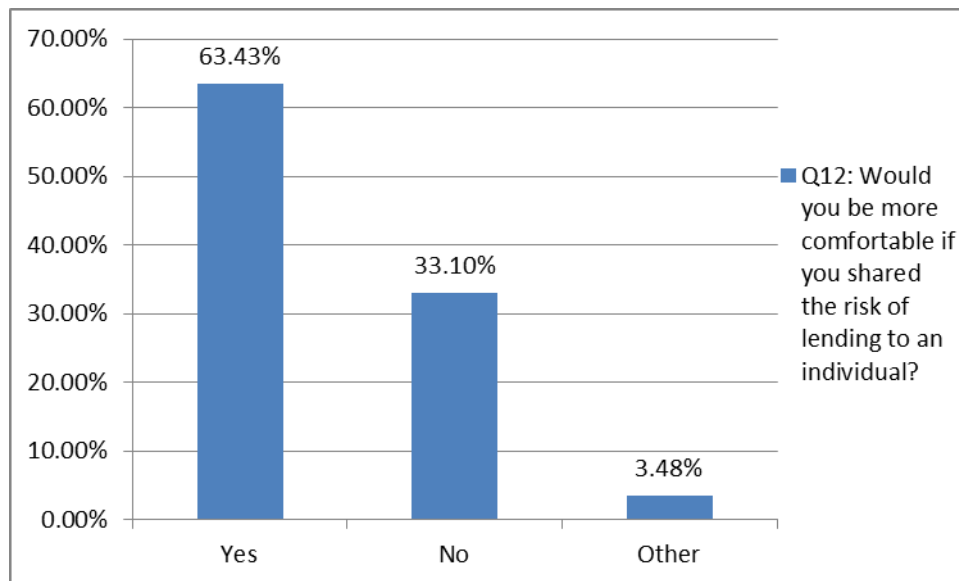


Figure 7.17 Default risk sharing within a peer-to-peer loan across numerous lenders

A notable number of respondents, 63.4% (711), said this structure would make them more comfortable to lend to individuals, whereas 33.1% (371) answered it would not. Other responses included mentioning that the risk is too high and that they would not enter into this type of lending at all. Other respondents said it depended on the size of the loan and contribution size, and some stated they would need loan protection. Others said they would not consider sharing the interest income, and a few were open to the idea of syndication.

Of the 711 people who answered yes to Question 12, 436 (62.6%) answered that they would consider lending to a stranger, as compared to 37.4% who would not. These figures are significantly different from those who said they would not be interested in sharing risk, where 19.2% would consider lending to a stranger and 80.8% would not, as shown in Figure 7.19. Table 7.3 shows the Chi-Square test statistic as 36.62 ($p = 0.0001$).

This provides some evidence that the risk-sharing approach of P2P lending attracts more lenders to participate in loans in smaller amounts. The risk of default

is diluted if smaller contributions are made by a number of lenders, as the loss is not held by one lender but by a number of lenders in smaller degrees.

Of those who would be comfortable to share the risk of default with other lenders, 447 (62.8%) said they had already given a loan to a family member or friend, and 387 (54.4%) had not experienced a default in those loans. Of the 711 respondents, 438 (61.6%) indicated they would prefer to fund an educational loan, 285 (40%) said they would fund a loan to start a business, and 138 (19.4%) said they would like to maximise their returns on any loan.

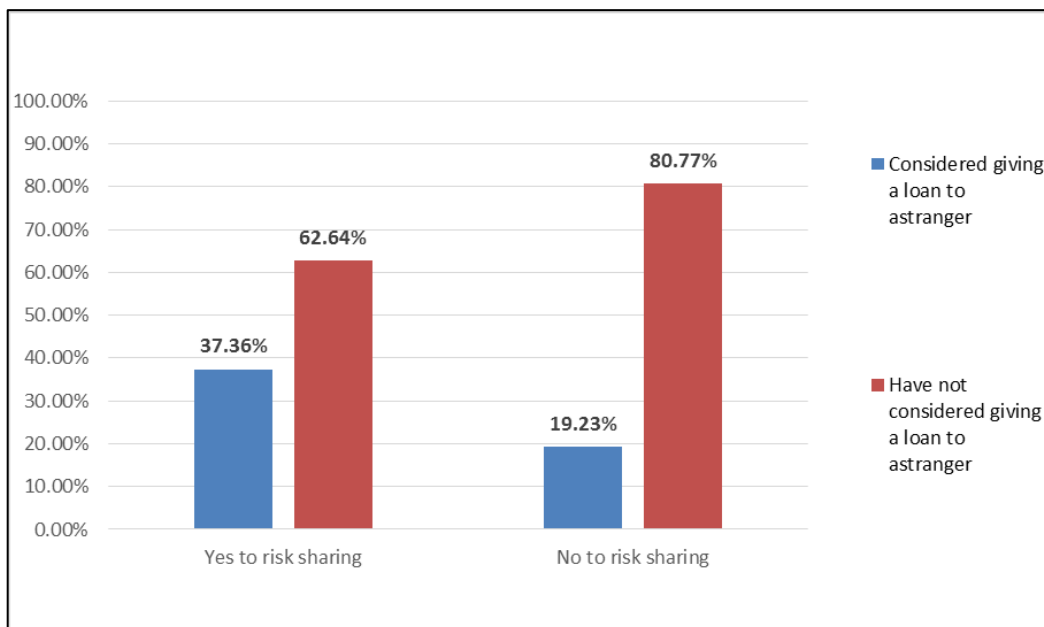


Figure 7.18 Considered sharing lending risks and giving loans to strangers

7.2.13. Lender preferences towards a borrower’s location

The objective of Question 13 was to begin to understand the lending preferences of respondents, who were asked if they would lend to a person who resided in a different province. The majority of respondents, 54.4% (610), answered no. Fewer, 41.8% (468), said this would not influence their lending decision. Other responses included: “it depends on their educational level, ability to be reached, and how well I know them”; “it’s only dependent on their risk profile – distance and geography is not an issue”; “I would lend to a business in another province”; “it would be harder

to get hold of a person in another province if I needed to”; “only if he/she is a close friend or family member”; and “I would only be willing to lend to a person outside my province if I knew someone who knew them, and I trusted that person’s judgement”.

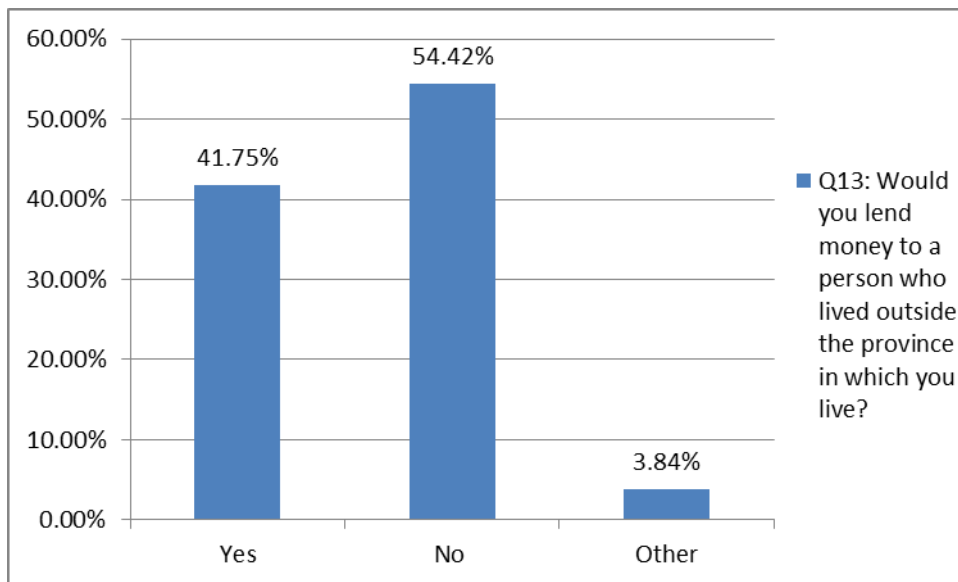


Figure 7.19 Willingness to lend to people outside the lender’s province

There is a theme that emerges from the “other responses” section: distance would not be a problem if they had a trusted referral on the risks of lending to that person in another province. This provides an insight into lending with a small degree of separation between the lender and borrower.

It is noteworthy that of those respondents who said they would not lend to someone in another province, 338 (55.4%) said they would feel comfortable to share lending risks over a number of lenders. This is significantly different from those who said they would not lend to someone in another province and would not be comfortable to share risk. The Chi-Square test statistic is 53.75 ($p = 0.0001$).

7.2.14. Lender preferences towards a borrower’s race and gender

Question 14 tested whether race and gender influenced the lending decision. Figure 7.20 shows that neither race nor gender has a bearing on the lending

decision. The majority of respondents, 78.8% (883), indicated they would give a loan to a person of a different race or gender, while 15.4% (173) said they would not.

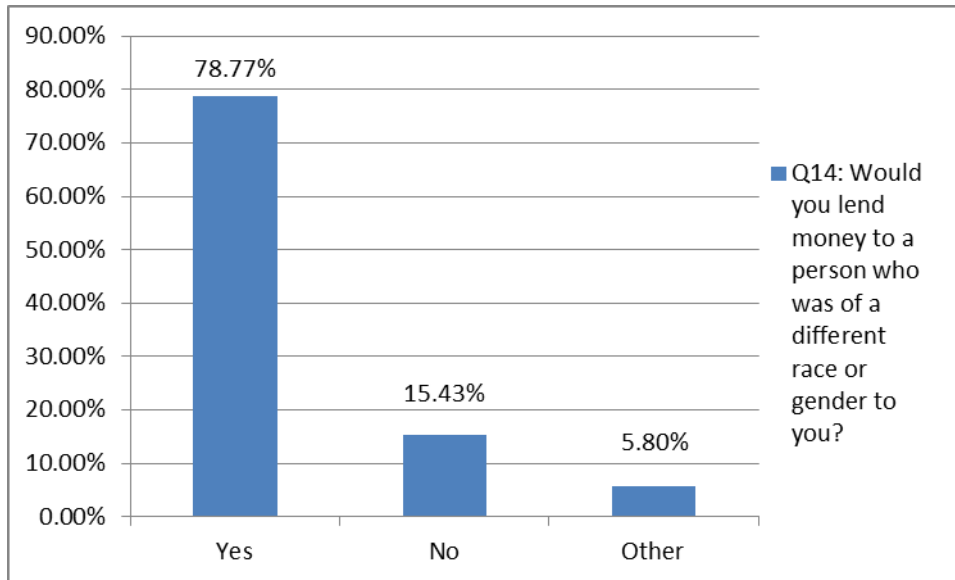


Figure 7.20 Willingness of lenders to lend to people of a different race or gender

There are three main themes that can be extracted from the other responses:

1. Race and gender seem irrelevant when lending, and risk assessment and the propensity to repay are the only issues to consider. It seems improbable that race and gender would not influence the lending decision, but respondents dismissed these factors as irrelevant.
2. Some people are risk averse and would not lend at all.
3. People tend to lend only to close relatives and friends they know well.

Figure 7.21 shows a cross-view of two lending variables: risk assessment, and race and gender. A notable portion of people are willing to lend if risks are managed properly. The test statistics show that these proportions are significantly different, with a Chi-Square of 77.71 ($p = 0.0001$).

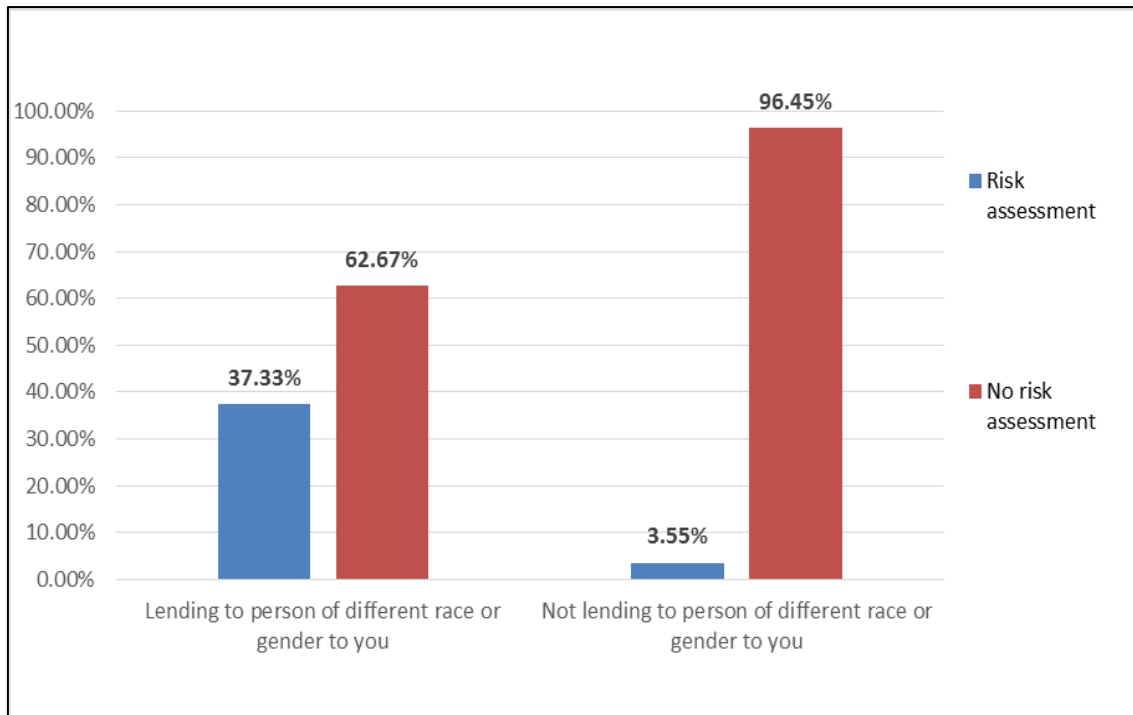


Figure 7.21. Willingness of lenders to lend to strangers of a different race and gender

7.2.15. Interest rates charged on peer-to-peer loans

Respondents were provided with three bands of interest rates: zero or no interest; 10% to 20%; or the maximum possible interest rate. Generally, unsecured loans carry an average interest rate of 23.5% (NCR 2012).

A meaningful portion of respondents, 47.5%, selected an interest rate of between 10% and 20%, 19.8% selected that they just need their capital repaid, and 18.4% wanted to achieve the maximum interest rate return possible.

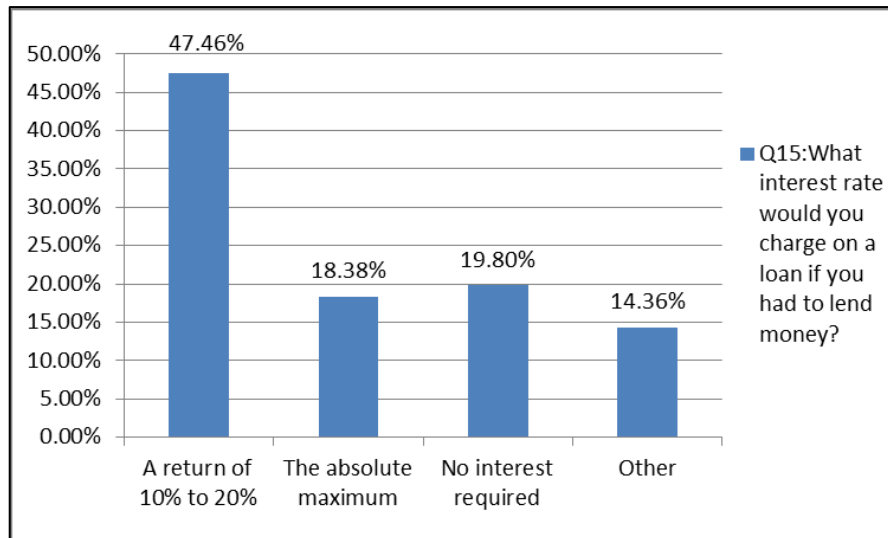
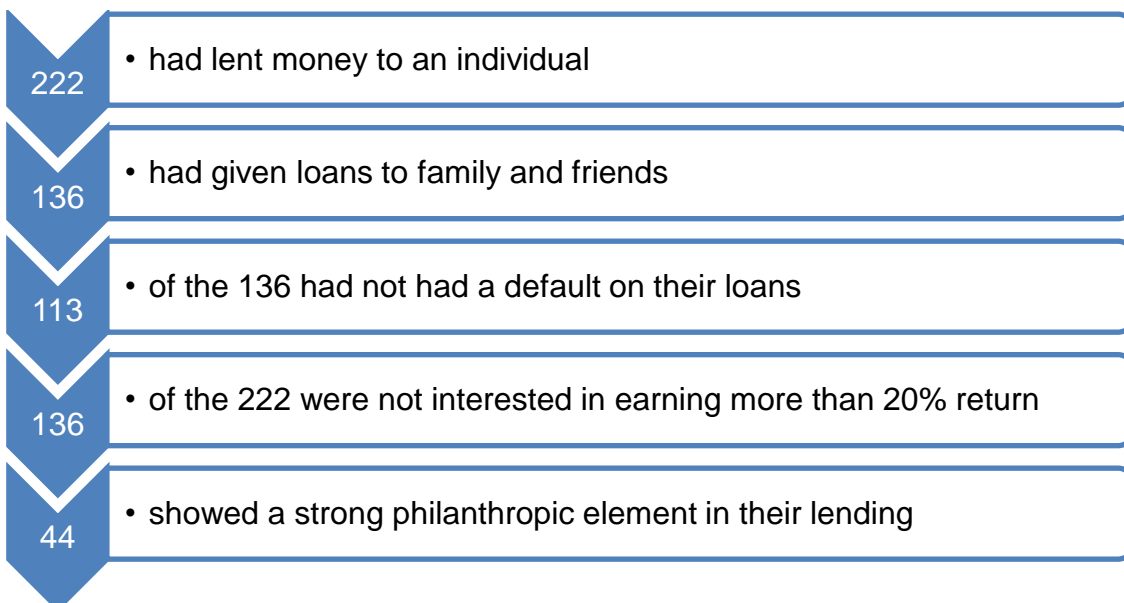


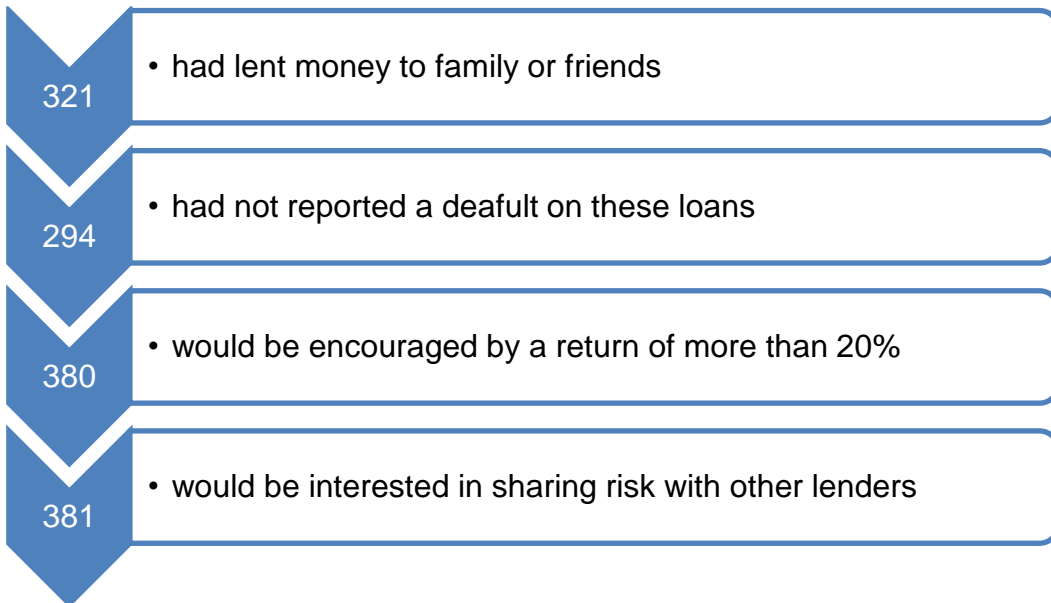
Figure 7.22 Returns required by lenders on loans to individuals

Other responses included: “I would not lend”; “inflation-based rate ranging from inflation plus 10% to 50%”; “the borrower’s risk would be the interest rate determinant”; “zero interest rate for education and more for luxury purchases”; “I would need a minimum of 20% return”; and “I would invest in equities and the maximum NCR rate”.

Of the respondents who said they would only want their capital repaid:



Of the 532 respondents who said they wanted to earn a return of between 10% and 20%:



Interestingly, the cross-view of interest charged and willingness to lend to family members or friends yielded an insignificant statistical test of proportions at a 95% significance level with Chi-Square of 1.69 ($\rho = 0.639$). See Table 7.3.

Of the 206 respondents who said they would like to earn the absolute maximum return possible, 119 (57.7%) had given a loan to family or friends, and 114 (55.3%) had not reported a default on those loans. Again, the test statistic shows an insignificant difference between those who reported a default and those who did not, with a Chi-Square of 3.33 ($\rho = 0.343$).

On the other hand, 157 (76.2%) would be encouraged to lend when offered a return of more than 20%, and 153 (74.2%) would be willing to share the risk of lending. These respondents illustrate similar results to those of the respondents who selected to earn returns of between 10% and 20%.

7.3. Survey findings: Borrower-orientated responses

The remaining 15 questions of the survey focused on the borrowing capacities, abilities and inclinations of respondents.

7.3.1. Debt types of borrowers

Question 16 aimed to identify the types of loans the respondents have as debt obligations. The types of loans were split into consumption and developmental loans, and respondents had the chance to select more than one loan. A total selection of 2 375 loan types were selected, and 114 people selected “other” as an option, meaning that, on average, each respondent has 2.1 credit facilities.

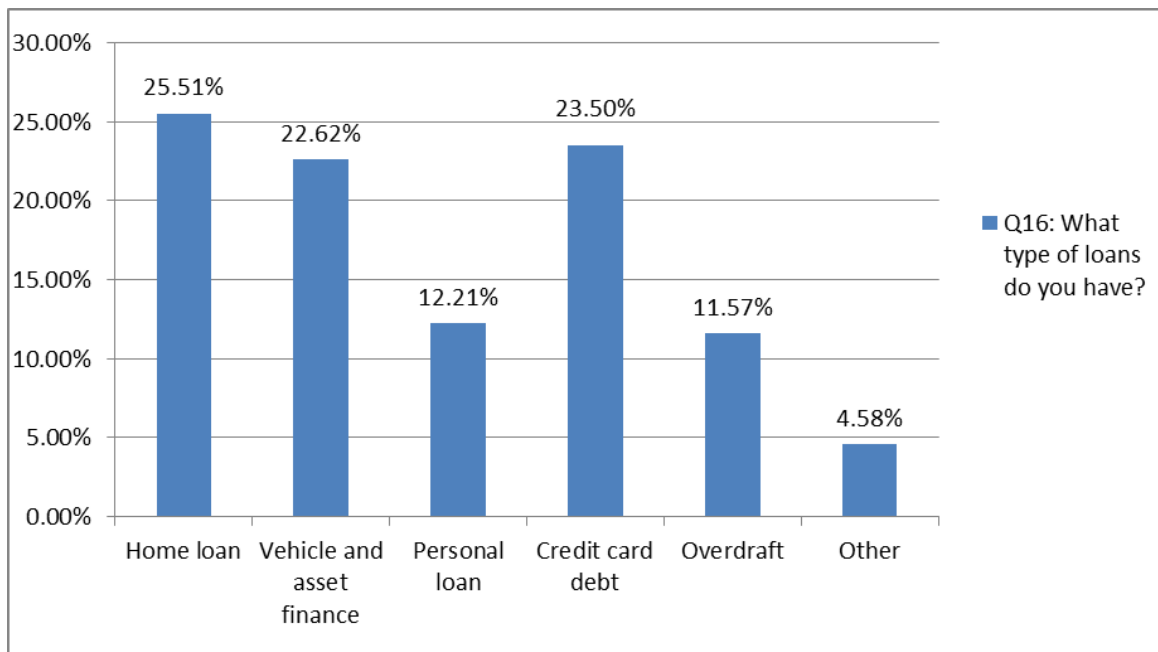


Figure 7.23 Percentage distribution for loan types held by respondents

Of the 2 375 selections, 1 177 consumption loans were selected, including personal loans, credit card debt or overdrafts. Other responses included student loans, business loans, revolving credit loans, no debt at the moment and clothing loans.

Figure 7.24 shows the difference between the types of loans respondents had and the amounts they said they saved monthly. It is important to note the trends over the savings classes. The use of personal loans, credit card debt and overdraft decreases in proportion to the higher the amount saved each month.

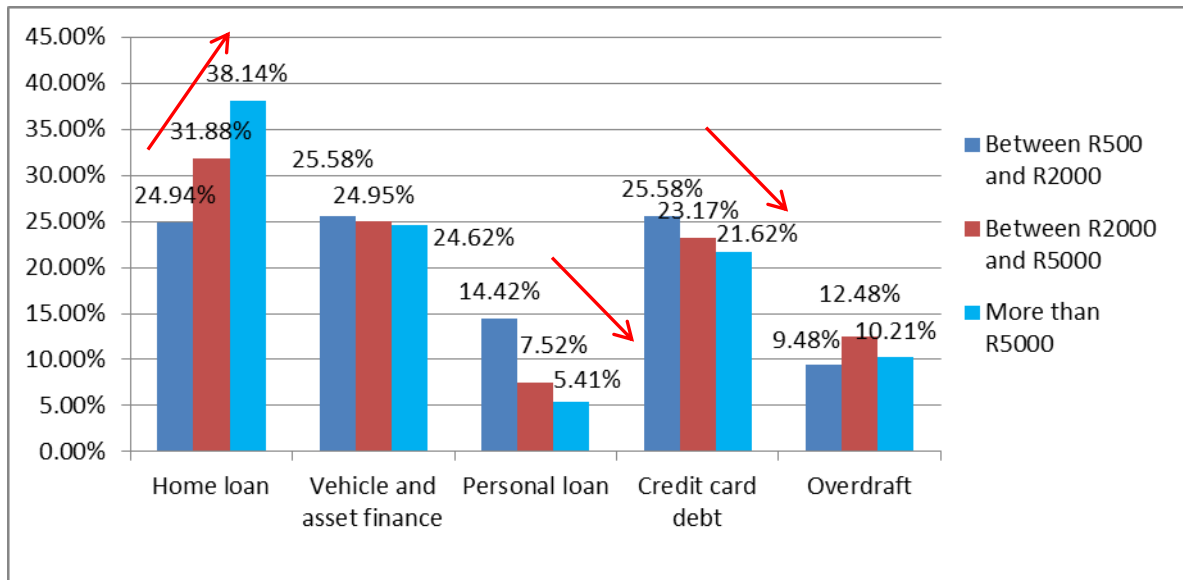


Figure 7.24 Loan types reported by respondents with different concurrent monthly savings amounts

7.3.2. Loan usage

Question 17 aimed to understand the usage of the respondents' loans. Almost half of the respondents, 524 (46.7%), stated that they use debt only to purchase assets such as houses and cars, whereas 96 (8.7%) said they use debt to manage day-to-day expenses such as food, clothing and transport. These individuals may enter into a debt spiral with the continued use of consumption debt. The repayment burden of debt forces individuals to use more and more debt to live and repay previous debts. A significant number of people, 330 (29.4%), use debt for a combination of asset and consumption purposes.

Other responses included: "to pay for my education"; "to start a business"; "to pay for my wedding and medical expenses"; "to pay for lobola" [a traditional Southern African dowry]; "to renovate and expand the house"; "gearing up for rental properties and shared investments"; "airline tickets and online purchases"; "for paying bills that I have not budgeted for"; and "holidays and travel".

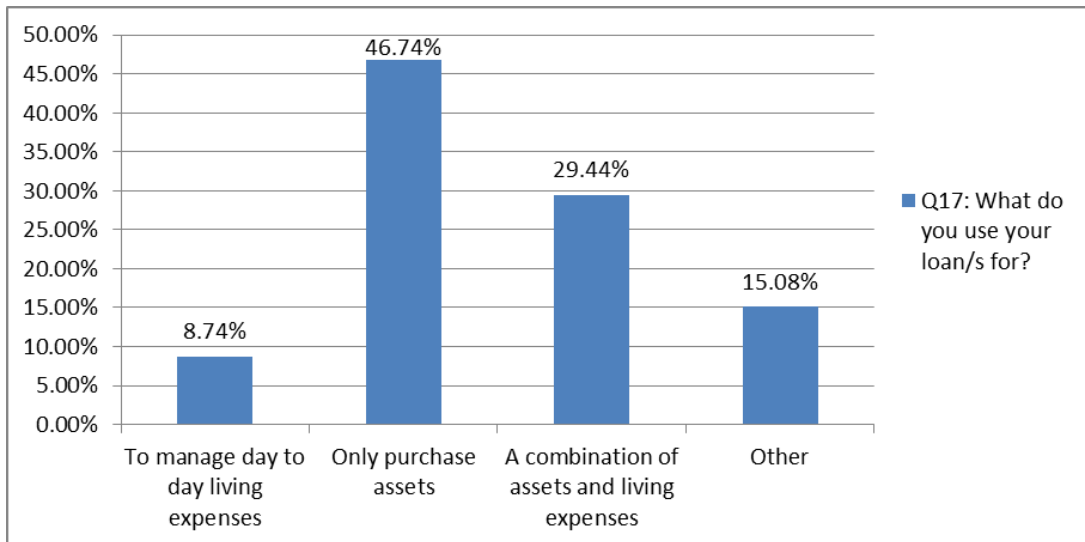


Figure 7.25 Use of loans by respondents

The responses to Question 17 expanded the findings of Question 16. The 524 people who said they used debt only for asset purchases mostly selected current debt types such as housing and car debt. For the 98 who said they used debt to manage daily expenses, the most common debt types were personal loans and overdrafts. The 330 people who stated that they used debt for a combination of purposes rated their loan types in the descending order of credit card debt, housing debt, car debt, overdrafts and personal loans.

7.3.3. Sources of loans

Question 18 asked respondents where they received their credit. As expected, the vast majority, 1 025 (91.4%), received credit from registered credit providers. An interesting segment of the surveyed population, 96 people, received loans from family and friends, as well as informal moneylenders.

Other responses stated: “I do not have credit at the moment” and “if I borrow small amounts, it’s from my mom, and I always pay her back. She doesn’t ask for interest. My parents co-finance my education, clothing and housing.”

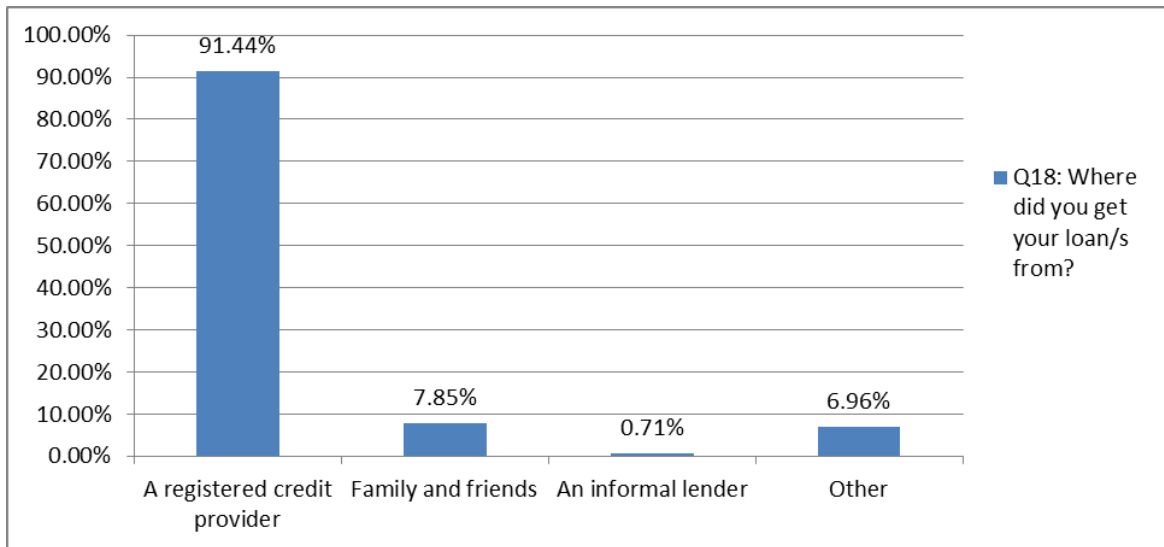


Figure 7.26 Sources of loans used by borrowers

It is interesting to see even a small number of individuals informally lending and borrowing from one another. Of these 96 respondents, 38 used loans to purchase a combination of assets and manage daily consumption, 32 used loans only to purchase assets, and the remaining 8 used loans only to manage daily consumption.

7.3.4. Credit provider selection

Respondents were asked to indicate the reason or combination of reasons they selected their credit providers.

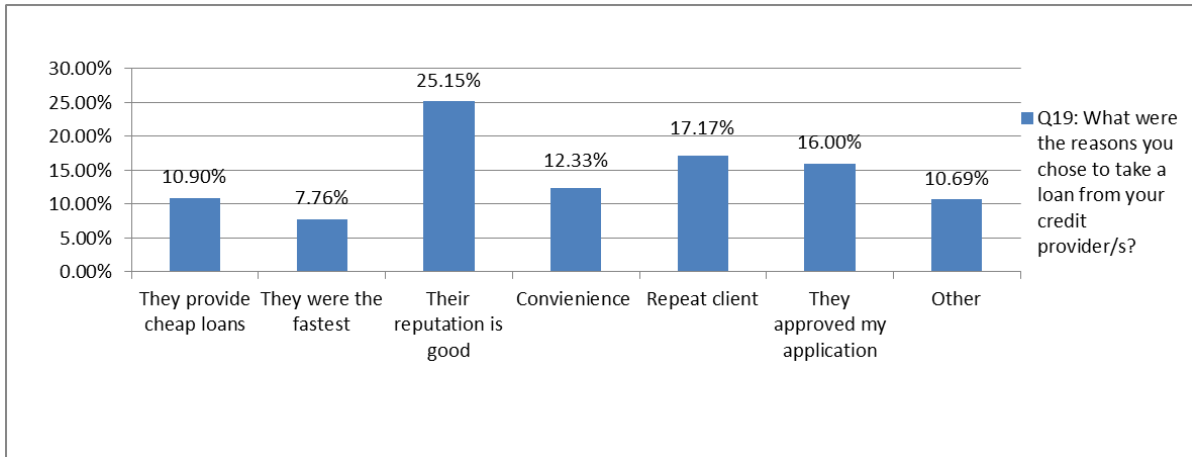


Figure 7.27 Reasons respondents took out loans from credit providers

The results of Question 19 revealed that people chose their credit provider because of its reputation (25.2%), repeat business (17.2%), approval of application (16%) and convenience (12.3%).

Other responses included additional benefits such as travel insurance, credit or frequent flyer accounts. People also indicated the ease of using one supplier for all banking needs, low fees and charges, getting staff rates and trusting their provider.

7.3.5. Loan applications online

Question 20 aimed to uncover the online loan application preferences of individuals, and their comfort levels when using the internet as a medium to apply for loans. A significant portion of respondents – 643 (57.4%) – stated that they would not go or had not gone online to apply for a loan, whereas 459 (41%) said they would use or have used the internet to apply for a loan.

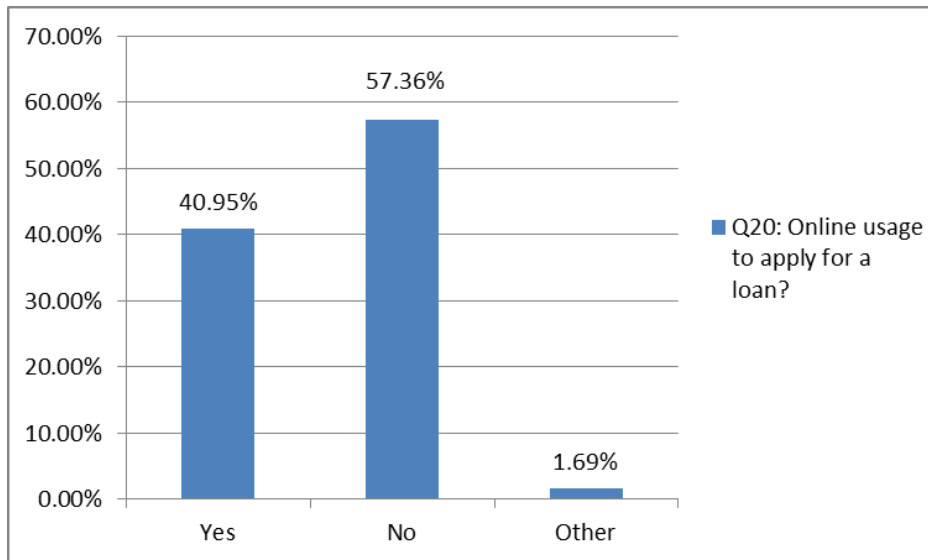


Figure 7.28 Do borrowers go online to apply for loans?

The insights from this question are intriguing. Of the 1 121 responses, 643 revealed they have not or would not apply for a loan using the internet. Of the 643 respondents who answered no to Question 20, 569 (88.5%) said they used online banking. Of those 643 respondents, 485 (75.4%) had made an online purchase in the past 12 months. The reason for the decline from 569 to 485 is that the majority of respondents were concerned about the security of websites. If a website is trusted and has a good reputation, more people may use the internet to apply for loans.

Table 7.4. Pearson Chi-Square test for online loan applications

Pearson Chi-Square test for borrower-orientated lending			
Variable 1	Variable 2	Chi-Square	Probability
Gone online to take out a loan	Do you bank online?	28.0686	0.0001
Gone online to take out a loan	Have you made any online purchases in the past 12 months?	25.0318	0.0001
Take out a cheaper loan to pay off a more expensive loan	Encouraged to lend money by earning more than 20% interest	30.0081	0.0001
Loan from a family member with lower interest rate	Loan from an individual instead of a bank or credit provider	265.2989	0.0001
Loan from a family member with lower interest rate	Take out a cheaper loan to pay off a more expensive loan	50.6778	0.0001

Table 7.4 shows the statistical results of the proportion of respondents with regards to borrowing online, cheaper loan substitution, and borrowing from family and friends. Clearly, all the cross-views between the questions have significantly different proportions, as shown by the probability levels ($p < 0.05$). The proportion of those respondents who use online banking is significantly different from those who do not in relation to whether they have or would consider applying for a loan online. The Chi-Square statistic is 28.07, with a probability of 0.0001. The 75.4% of respondents who said they had made an online purchase in the past 12 months is significantly different in numbers from those who have not made an online purchase with respect to whether they would go online to apply for a loan, with a Chi-Square test of 25.03 and a probability level of 0.0001.

7.3.6. Borrowing from individuals instead of a bank or credit provider

Respondents were asked whether they would take out a loan from an individual instead of an institution: 61.8% answered no; 33.2% answered yes. This is encouraging in the sense that formal P2P transactions are barely understood or available in South Africa, yet 372 of the 1 121 respondents were already open to the concept.

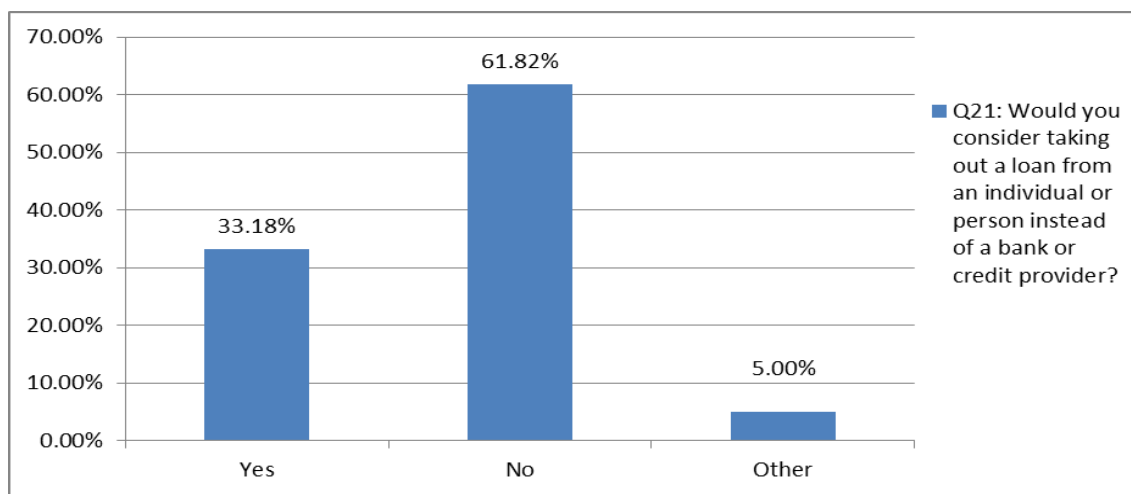


Figure 7.29 Willingness to borrow from an individual instead of a bank or credit provider

Other responses included: “only if they were a close family member or friend”; “it depends on the terms and conditions”; “it depends on our relationship”; “as long as my safety is not endangered and there are reasonable payment terms”; “it depends on the rate and term”; and “only if I knew the person really well”.

Interestingly, 329 (82.3%) of the respondents who took out loans at registered credit providers mentioned that they would consider taking out a loan from an individual. That equates to 32.1% of the respondents, who said their loans were with registered credit providers, indicating they would consider taking a loan from individuals instead. This represents a significant number of loans that could move from registered credit providers to individual lenders.

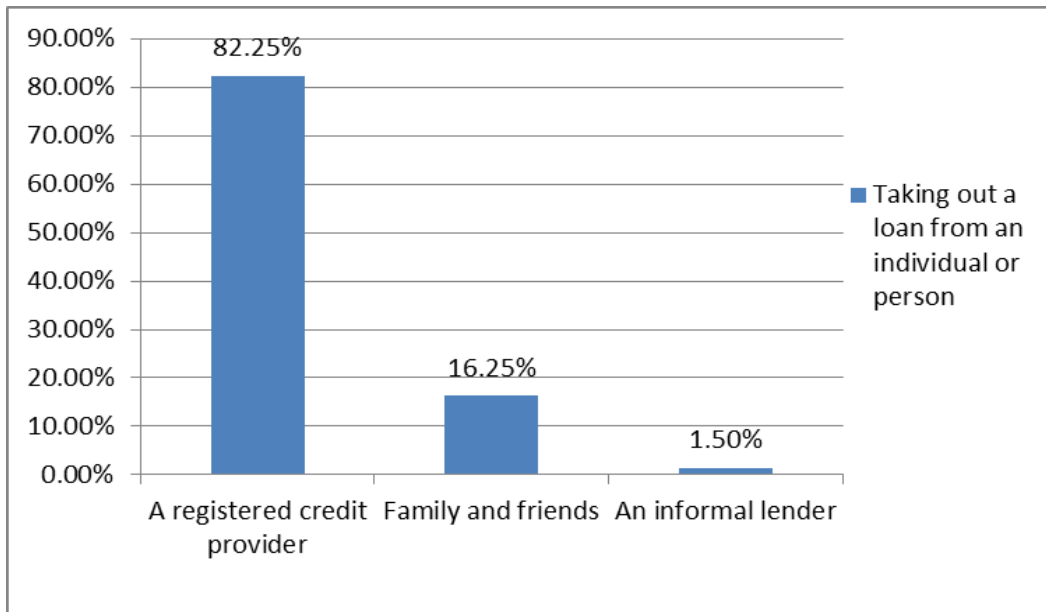


Figure 7.30 Willingness to take a loan from an individual

7.3.7. Borrower concerns when entering into a loan

Question 22 sought to identify the major concerns of borrowers when deciding on a loan. Respondents were allowed to select more than one answer to this question.

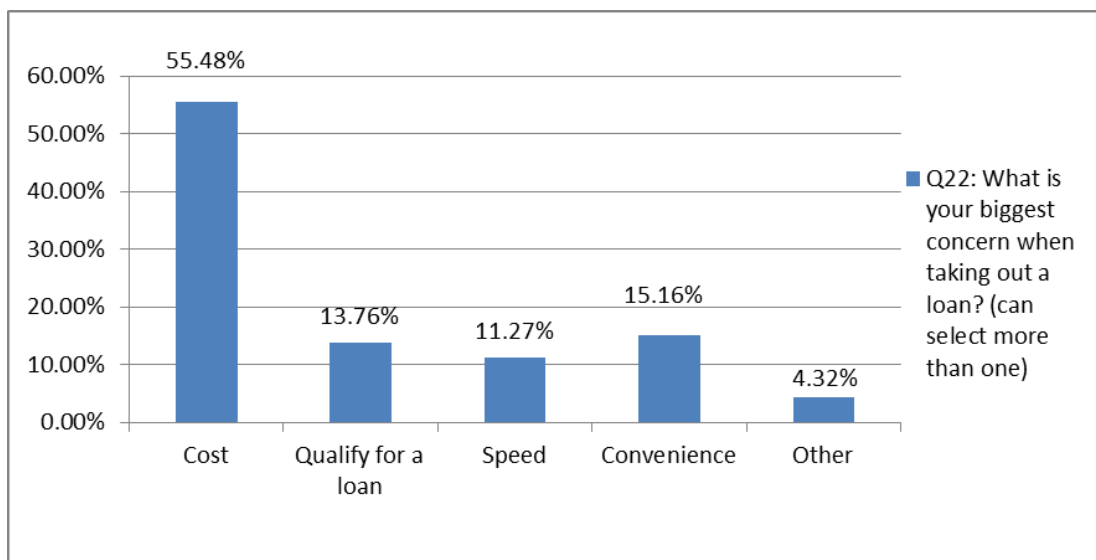


Figure 7.31 Concerns when taking out a loan

The major concern of borrowers is the cost of the loan, as selected by 911 of the 1 121 respondents, followed by convenience (15.2%) and loan qualification (13.8%). Respondents were allowed to provide more than one answer to this question. Other concerns raised included collateral, flexibility, repayments, default, recourse and confidentiality.

7.3.8. Most expensive debt

Question 23 asked about the highest rate on their current loans. Just more than one-third of the respondents, 34.5%, said less than 10% and 37.1% said between 10% and 20%. Just more than 10% of respondents said the rate was higher than 20%, which typically denotes some sort of unsecured debt.

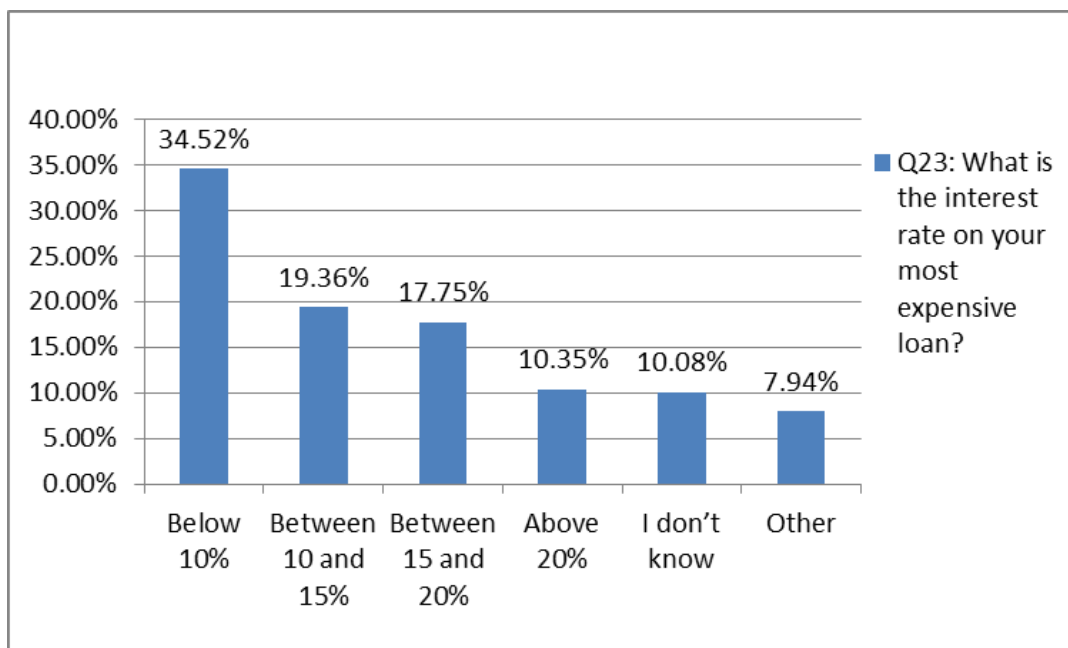


Figure 7.32 Cost of most expensive debt

Other responses included the use of credit cards as a payment strategy to avoid taking out a loan. This includes a monthly credit card repayment. Another respondent reported no debt at all.

7.3.9. Refinancing debt

Question 24 tested whether people are interest-rate sensitive once a loan has been granted. Surprisingly, 427 (38.1%) people said they would not switch to a loan at a cheaper rate to pay off an existing loan at a higher rate, and 654 (58.3%) answered in the positive. Other responses were mostly indecisive.

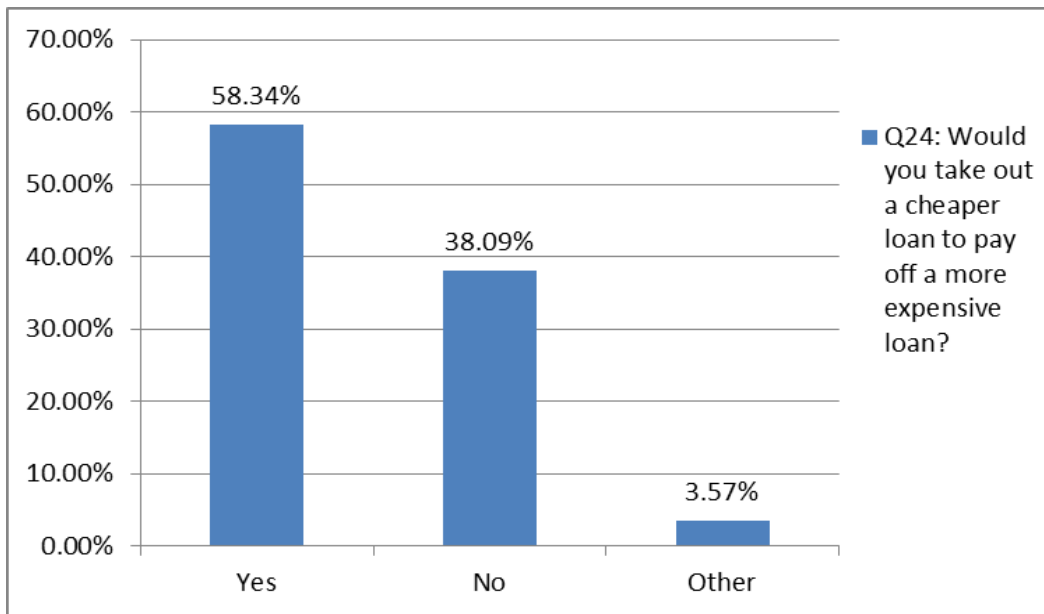


Figure 7.33 Debt refinancing to take advantage of lower interest rates

To put this into perspective, 262 of the 654 people who said they would switch their loans because of the costs involved said they would consider taking out a loan from an individual, and 555 of the 654 stated that cost was their biggest concern when taking out a loan. This indicates an available and existing loan market that shows a propensity to switch to lower-cost P2P loans.

7.3.10. Trade-off between cost and loans from family and friends

Question 25 tested a trade-off between lower costs and loans from family and friends. As seen in the results of Question 21, 61.8% said they would not take out a loan from an individual, and 33.2% said they would. If one adds the dimension of cost to the respondents' choice, 53.2% said they would take out a loan from an

individual, and only 44.9% said they would not. This is a 20% increase in respondents who said they would take out a loan from an individual.

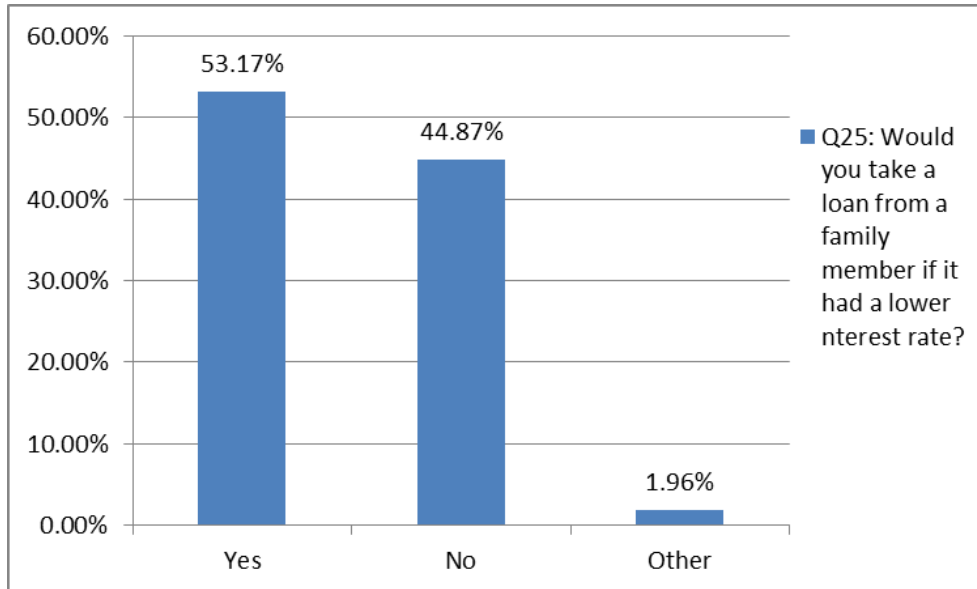


Figure 7.34 Willingness to take loans from family at lower interest rates

Interestingly, 243 of the 596 respondents who would borrow from family and friends at a lower cost responded negatively to Question 21 (would you consider taking out a loan from an individual instead of a credit provider?), but the incentive to reduce credit costs encouraged them to change their minds. An intriguing insight is that only 408 of the 596 said they would switch loans from a more expensive loan to a cheaper one.

7.3.11. Peer pressure experienced when loans are taken from family and friends

The objective of Question 26 was to test the moral hazard of borrowers when repaying debts or loans to family members or friends. As expected, the majority of respondents – 696 (62.1%) – said they would experience more pressure to repay their loans to family and friends, although 376 (33.5%) said they would not feel additional pressure. This is a critical result for P2P transactions as it directly addresses moral hazard, a cornerstone of the sustainability of P2P lending.

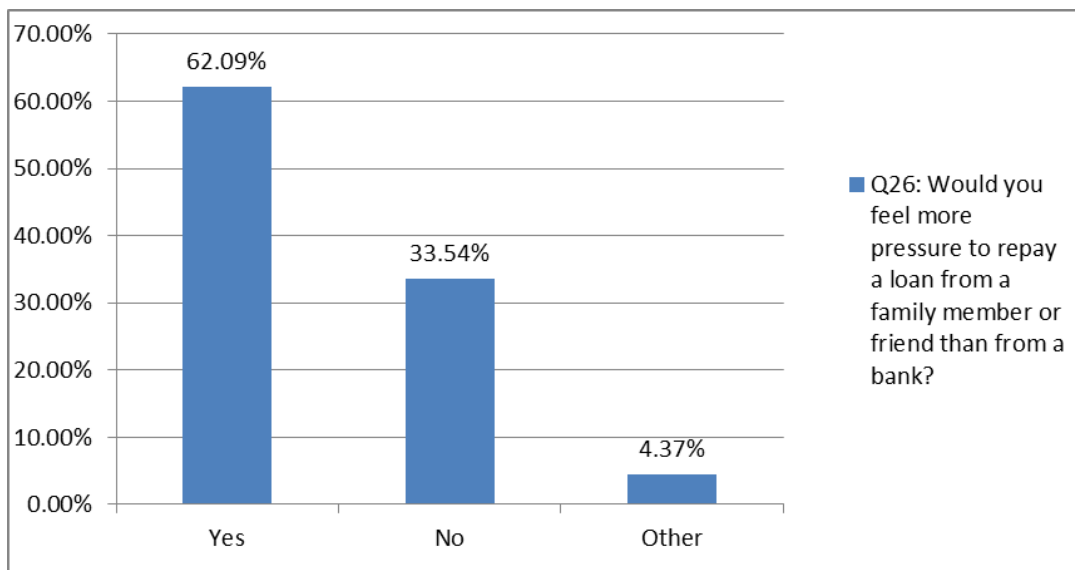


Figure 7.35. Peer pressure to repay a loan from a family member or friend

7.3.12. Online loan applications

Question 27 tested whether respondents would use an online platform to apply for a loan. The results showed that 696 respondents (62.1%) would use an online platform, but 393 (35.1%) would not. This adds to the findings of Question 21 – that 459 respondents (41%) have gone online to take out a loan, whereas 643 (57.4%) have not.

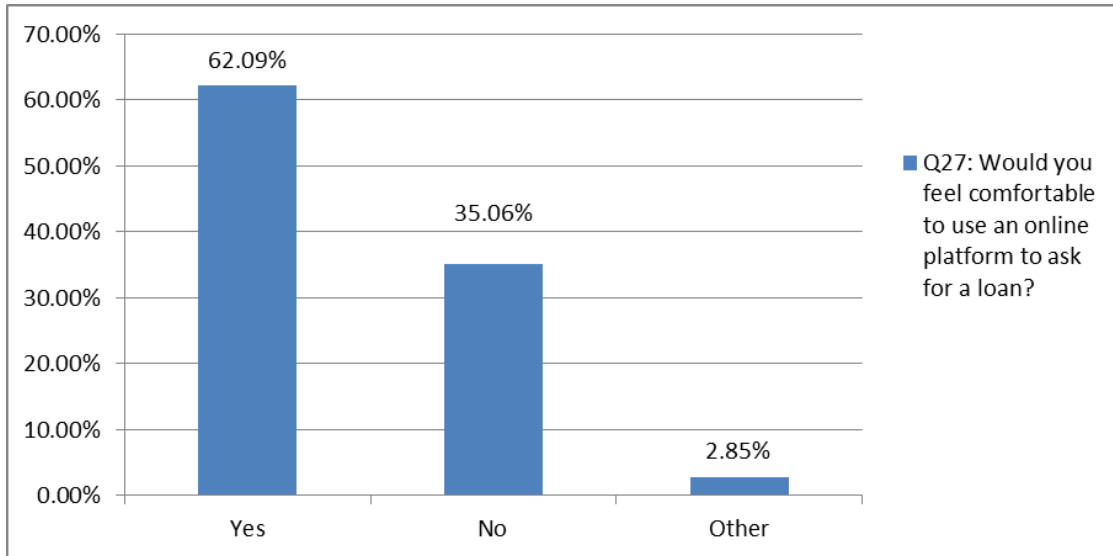


Figure 7.36 Willingness to borrow via an online platform

7.3.13. Debt levels among borrowers

The objective of Question 28 was to ascertain debt levels of borrowers in the surveyed population to gain insight into adverse selection in the group. The majority of borrowers, 880 (78.5%), reported to be coping financially with their debt levels.

Only 187 (16.7%) said they were not coping with their debt. Of these 187, 98 have loans with interest from 15% to more than 20%, 131 would switch to a lower-cost loan, 113 would consider taking a loan out from a family member or friend, and 121 would feel more pressure to repay loans from family or friends.

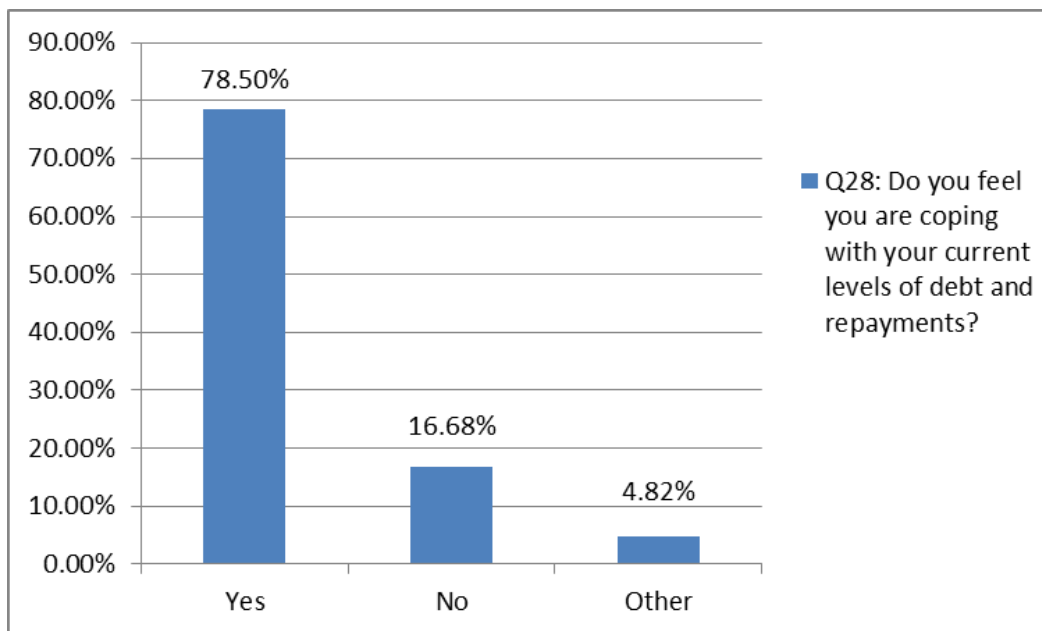


Figure 7.37 Levels of debt and repayments

This finding is critical to the sustainability of P2P transactions. Adverse selection is the ability, not the choice, of a borrower to repay their debts. From the perspective of the respondents, they are coping well enough to make ends meet.

7.3.14. Perceptions of traditional credit providers

Question 29 tested the respondents’ perception of banks and other traditional credit providers, and the perceived cost of the loans they provide. This provides evidence for the theory of an anti-institutional movement towards P2P transactions. This question asked whether the respondents thought banks and traditional credit providers charged too much on their loans; 906 (80.8%) responded yes and 164 (14.6%) said no. Other responses included: “bank charges are alright, but other credit providers like retail stores charge too much”; “only unsecured lending charges excessive origination fees”; “it depends on the client’s risk profile”; “micro-lenders and retailers are very expensive”; “in general, yes, and it’s mostly directed towards lower-income people”; and “it’s done according to legislation and more than 20% interest seems the norm, but I feel it is too high”.

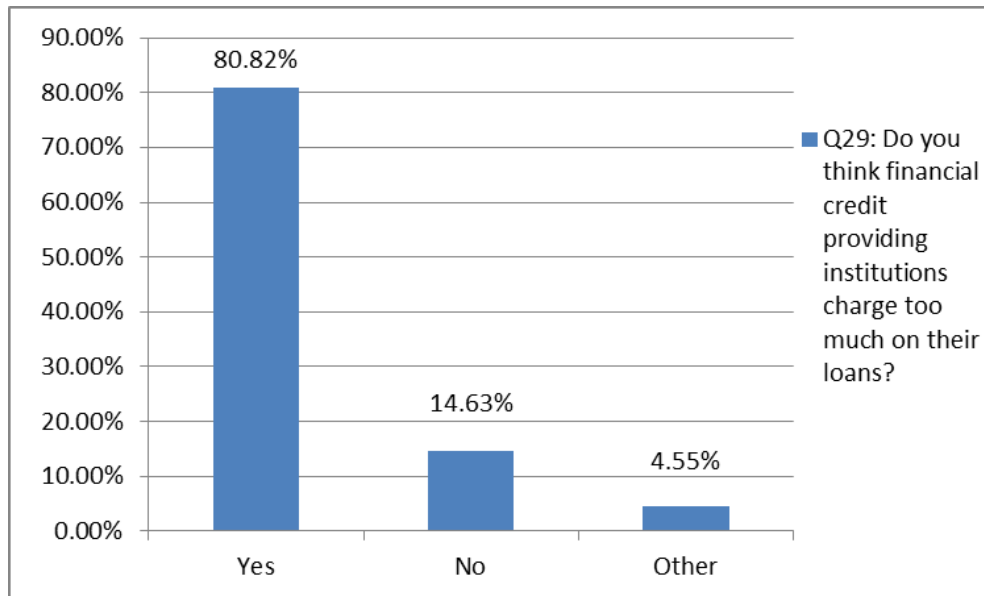


Figure 7.38 Perceptions that credit providers charge too much on loans

7.3.15. Revisiting the use of the internet as a medium to borrow

Question 30 again tested the idea of using the internet to apply for loans, as it is central to P2P transactions. More than two-thirds of respondents – 749 (66.8%) – said they felt comfortable using the internet to take out loans, and 344 (30.7%) said they did not.

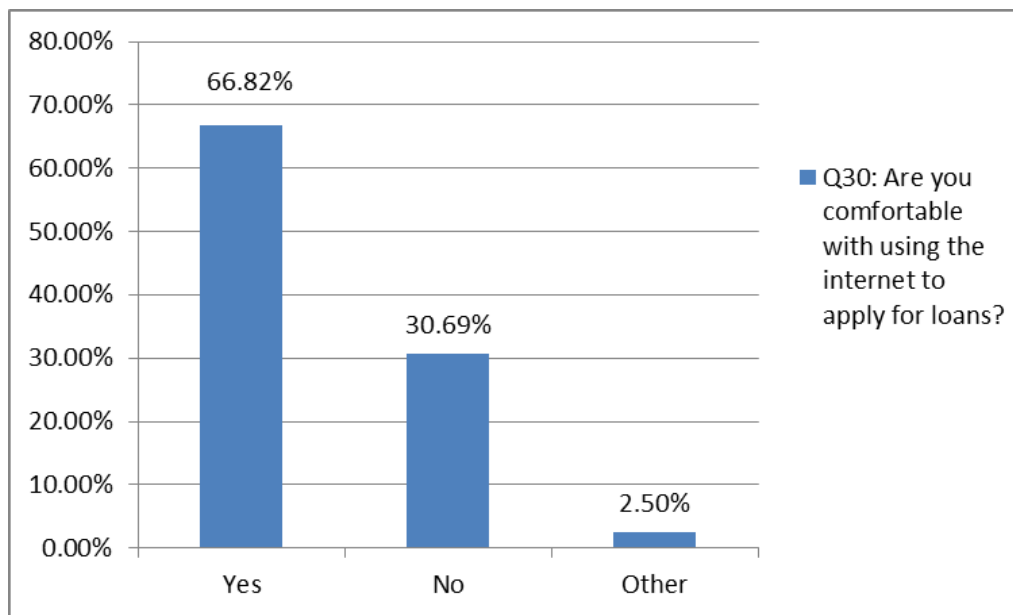


Figure 7.39 The use of the internet as a medium to borrow

Other significant proportions worth noting from Table 7.4 are the differences in the cross-view between those who would consider taking out a cheaper loan to pay off a more expensive loan or not, and those who indicated that earning more than 20% in interest is an encouragement to lend money or not. The test statistic is 30.00 ($\rho = 0.0001$).

Also, the cross-view between a loan from a family member with a lower interest rate and a loan from an individual instead of a bank or credit provider has significantly different proportions, with a Chi-Square test statistic of 265.30 ($\rho = 0.0001$).

This is also the same for the cross-view between a loan from a family member with a lower interest rate and a cheaper loan to pay off a more expensive loan, where the Chi-Square is 50.67 ($\rho = 0.0001$).

7.4. Conclusion

The results from the online survey revealed useful insights into the antecedent variables of savings and debt activities. These variables begin to describe a potentially sustainable solution.

The most notable lender insight derived from the questionnaire is that the majority of respondents surveyed confirmed they saved a meaningful amount of money every month. However, the common vehicle for saving was a bank account. This offers an opportunity to utilise these savings in a more efficient manner to earn a return higher than they currently do.

Most respondents reported that the interest return on their savings was less than 10%. More than 90% of respondents bank online, which bodes well for other online financial transactions, such as online shopping, which more than 80% of respondents had done in the past 12 months. As discussed, this includes a respondent bias as the survey was conducted online.

Of the respondents, 59% have given a loan to a family member or friend, 44% have experienced a default or non-repayment, and 66% would not give a loan to a stranger, but, if they had to, most would fund developmental loans. A third (33%) of the respondents said they would give a loan to a stranger; this increases to 58% if the return were 20% or higher. And 63% of respondents would be comfortable sharing the risk of default if they were one of 10 lenders.

Although lenders would not be inclined to loan to borrowers outside their province, race and gender would be irrelevant to their lending decisions.

The more notable borrower insights derived from the survey are: most respondents have a combination of developmental and consumption loans; 91% of respondents took loans from registered credit providers with an established reputation; and 40% of respondents were comfortable taking a loan out over the internet (which increased to 66% when the question was repeated at the end of the survey).

Two thirds (61%) of borrowers said they would not take out a loan from an individual, but 81% said cost was a deciding factor. Over half (58%) of the respondents would take out a cheaper loan to replace a more expensive one, and 53% said they would take out a loan from family and friends.

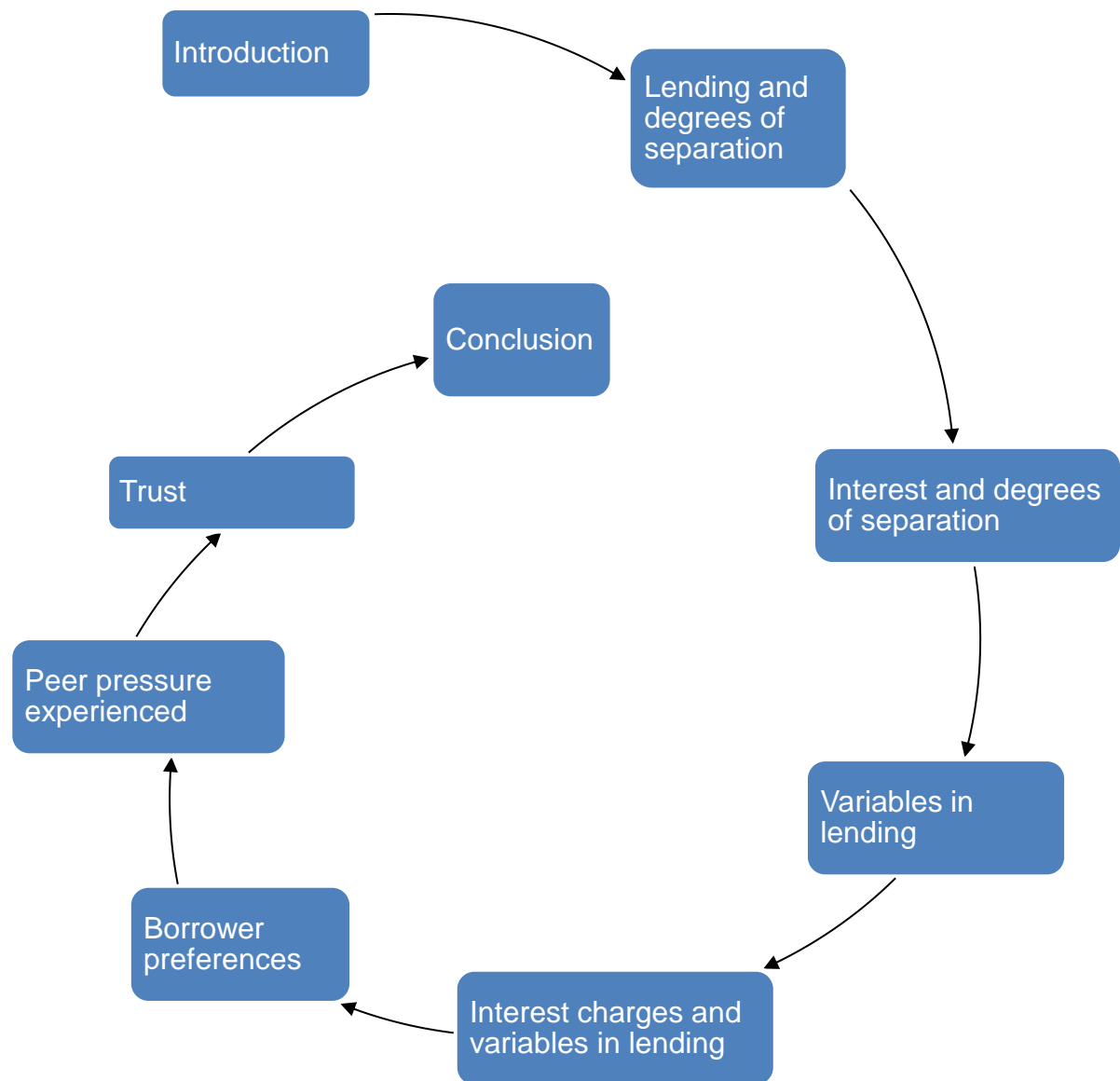
Importantly, 62% of respondents said that they would feel more pressure to repay a loan to a friend or family member. This corresponds positively with the theory that P2P lending induces a higher level of peer pressure.

There is a perception that credit providers charge too much, and this provides an opportunity for P2P lending to compete with traditional lenders.

The results suggest potential readiness in both lenders and borrowers to take on P2P lending. However, specific antecedents need to be present to reveal this readiness. The form of P2P lending may be limited, with factors such as interest rates, familiarity, loan types and loan usage all playing a role. However, there seems to be potential openness to the idea and process of P2P lending.

There could be an opportunity to position P2P lending as a higher-earning, higher-risk asset class that attracts higher-yield-seeking investors. Based on the low returns earned on savings in bank accounts, savers could divert their savings (or particulars thereof) into a higher-earning investment.

Chapter 8: Research findings: Focus groups



8.1. Introduction

The objective of this chapter is to report the findings of the focus groups' data, followed by a discussion of the findings. As previously noted, the 51 subjects from the two focus groups were purposefully selected due to their banking experience. Two statistical tests – the t-test and One Way Analysis of Variance (ANOVA) test – were performed to supplement the results.

T-tests and ANOVA investigate whether groups, or two continuous variables, are significantly different (Saunders *et al.* 2009). The hypothesis states that the two variables are equal in terms of their mean values, especially in this case. The interpretation of the probability level is the same as the Chi-Square discussed in the previous chapter: if it's less than 0.05, the hypothesis is rejected; if it's more, the hypothesis is accepted. The t-test is also used to test the difference in the means of a single continuous variable against a categorical variable with two classes – for example, gender (male and female) – as is the case in this study.

The second statistical analysis conducted in this chapter is the ANOVA test. The test statistic is the F value, which has the same interpretation, based on the probability value, as the other tests discussed above. It assesses the likelihood of groups being different occurring by chance alone (Saunders *et al.* 2009) – for example, race (black, white, Indian and coloured) – as is the case in this study. The results are presented in each section where the related test was deemed necessary.

8.2. Research findings: Focus groups

The focus groups further investigated specific themes and trends identified from the results of the survey. The objective of the focus group was to inform the following questions:

1. Do the degrees of separation between individuals have a material impact on lending and the interest rate charged in P2P transactions?
2. Do variables such as race, gender, province and country affect lending decisions and the interest rates attached to those decisions?
3. What are borrowers' preferences with respect to privacy and loan sharing?
4. What peer pressure do borrowers feel about their loans from different sources?

8.2.1. Lending and degrees of separation

The results from investigating the degrees of separation show the willingness of subjects to lend money to people removed at each degree. The willingness of lenders to lend to people along six (6) degrees of separation is depicted by the trend line in Figure 8.1. The trend decreases as degrees increase. Thirty six (36) of 51 subjects said they would lend to people at one (1) degree of separation (1.D.S.). This decreased to 14 out of 51 at six (6) degrees of separation (6.D.S.). The trend lines show that the further removed a person is from the lender; the less likely it is for a P2P lending transaction to take place.

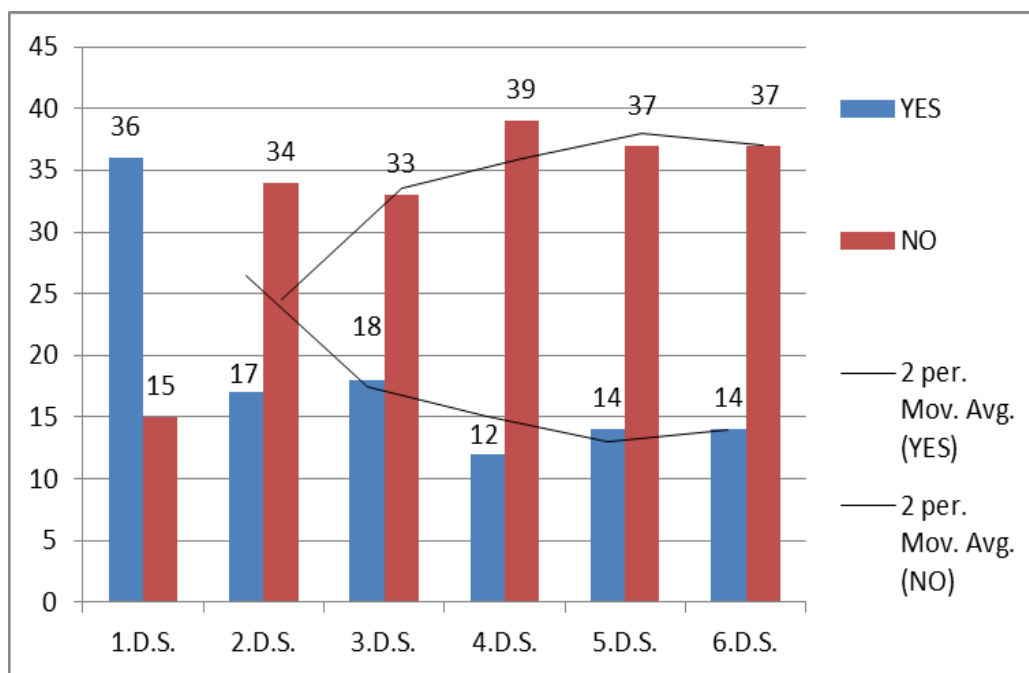


Figure 8.1 Willingness to lend to individuals at different degrees of separation

Focus group subjects said they would lend to a person they know, which is one degree of separation (1.D.S.). But the further removed the person is, the less inclined they would be to lend to that person. The trend line used two period moving averages, which is more representative than a linear trend line. A moving average is a trend indicator and an indicator of a mean measure (Kirkpatrick *et al.* 2015). The moving average shows people responding negatively to the lending question, and the decreasing trend shows those who responded positively.

This suggests that degrees of separation play a critical role in willingness to lend. In terms of social circles, the further removed a borrower is from the lender, the less likely it is that the lender will enter into a P2P transaction with them.

8.2.2. Interest and degrees of separation

The second discussion point focused on the interest rate lenders would charge on loans. Even if the lender said they would not lend to a person who was, for instance, separated by three degrees, focus group members were encouraged to indicate a possible interest rate charge they would use when lending to that person. The results of the interest charges are interesting. They inform the sustainability chapter of this study, which proposes that as degrees of separation become greater, so does the interest rate charged on these loans to compensate for higher perceived risk.

Figure 8.2 shows the increasing trend in what lenders would charge on their loans to borrowers at different degrees of separation. The majority of focus group subjects, 43, said they would not charge family or friends any interest, but the outliers pushed up the average rate to 1.9%. The interest rate steadily increased as the degrees of separation increased. At the last degree, some focus group subjects said they would charge as much as 100% on their loans.

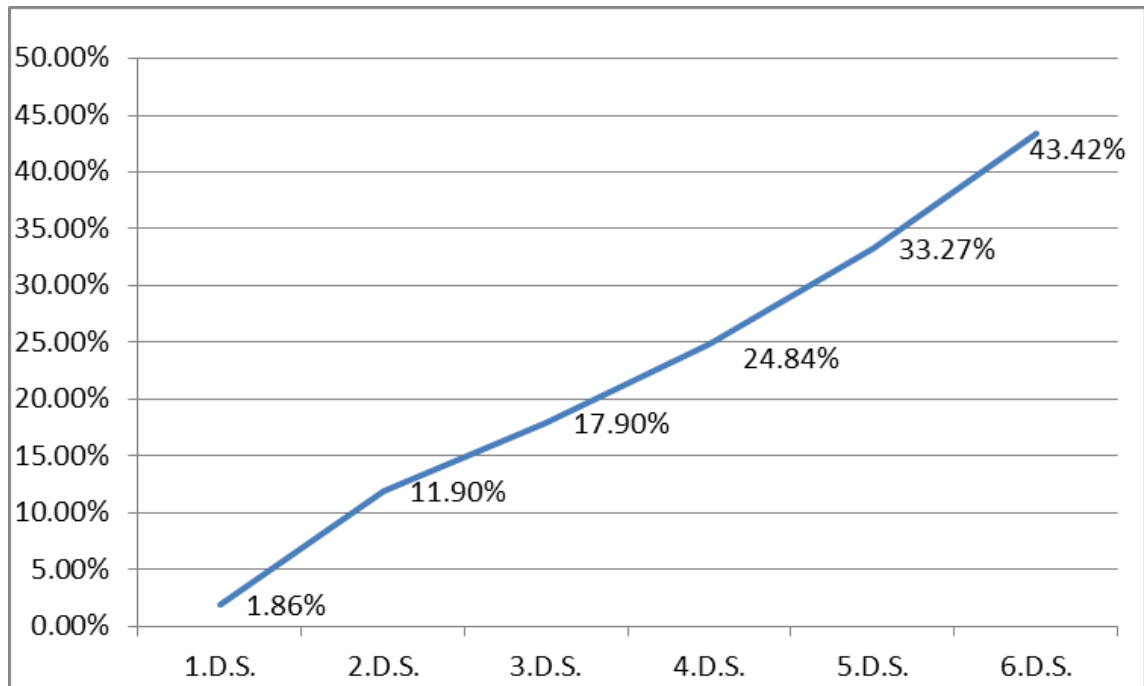


Figure 8.2 Average interest rates charged at different degrees of separation

The increased separation between P2P participants results in higher interest rate charges levied by lenders for a perceived risk of default. There is an incentive for lenders to charge higher rates for the risks associated with not knowing the borrower. As the lender does not know the borrower, they are not able to perform behavioural underwriting, which leads to a higher risk level that needs compensation through higher interest rate charges.

Table 8.1 Two-sample t-test for interest charged per degree of separation

Two sample t-test for interest charged			
Interest charged at any two levels	Difference	T-Value	Pr > t
Difference: Interest 1DS - Interest 2DS	-10.11	-6.50	0.0001
Difference: Interest 1DS - Interest 3DS	-16.03	-8.71	0.0001
Difference: Interest 1DS - Interest 4DS	-22.98	-7.99	0.0001
Difference: Interest 1DS - Interest 5DS	-31.41	-9.66	0.0001
Difference: Interest 1DS - Interest 6DS	-41.55	-9.73	0.0001
Difference: Interest 2DS - Interest 3DS	-5.92	-5.80	0.0001
Difference: Interest 2DS - Interest 4DS	-12.86	-6.28	0.0001
Difference: Interest 2DS - Interest 5DS	-21.29	-8.13	0.0001
Difference: Interest 2DS - Interest 6DS	-31.44	-8.22	0.0001
Difference: Interest 3DS - Interest 4DS	-6.94	-3.92	0.0003
Difference: Interest 3DS - Interest 5DS	-15.37	-7.23	0.0001
Difference: Interest 3DS - Interest 6DS	-25.52	-7.49	0.0001
Difference: Interest 4DS - Interest 5DS	-8.43	-5.50	0.0001
Difference: Interest 4DS - Interest 6DS	-18.58	-6.13	0.0001
Difference: Interest 5DS - Interest 6DS	-10.15	-4.82	0.0001

A t-test is conducted to determine whether the interest charged by the focus group is significantly different between any two levels of degree of separation. Figure 8.2 indicates a trend of increasing interest charged at each stage. But is the difference in the increasing interest charged significant? Table 8.1 shows that all the results are significantly different: the interest charged at 1.D.S. is significantly lower than the interest charged at 2.D.S., at a 95% significance level with a t value of 6.50 ($p = 0.0001$). The differences shown in Table 8.1 are all significant, at a 95% significance level with p values less than 0.05.

It is interesting to dig deeper into the interest rates charged across the degrees of separation and split this by gender. Data from the focus group shows that, generally, males would be charged more than females at all degrees of separation except 2.D.S. The margin between the genders grows to as much as 10.1%.

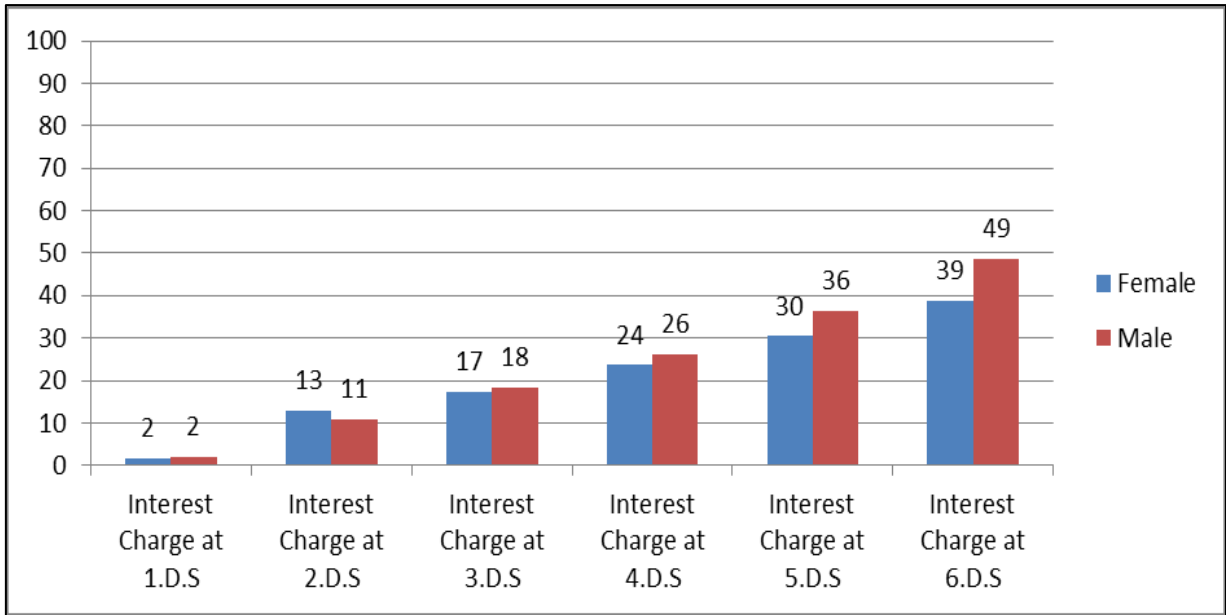


Figure 8.3 Interest charged by lenders to borrowers based on gender

Table 8.2 Two-sample t-test for interest charged by gender

Interest charged by gender				
	Female	Male	T value	P value
Interest charged at 1DS	2	2	-0.28	0.7781
Interest charged at 2DS	13	11	0.62	0.5382
Interest charged at 3DS	17	18	-0.27	0.7898
Interest charged at 4DS	24	26	-0.45	0.653
Interest charged at 5DS	30	36	-0.95	0.3451
Interest charged at 6DS	39	49	-1.23	0.224

However, Table 8.2 shows that the interest charged at each D.S. is not significant with respect to gender. At each D.S., the p value is less than 0.05, indicating that gender has no significant effect on interest charged.

Figure 8.4 shows responses from the focus group that reveal that at the largest degrees of separation, white people would charge the most interest, followed by Asians, coloureds, blacks and Indians.

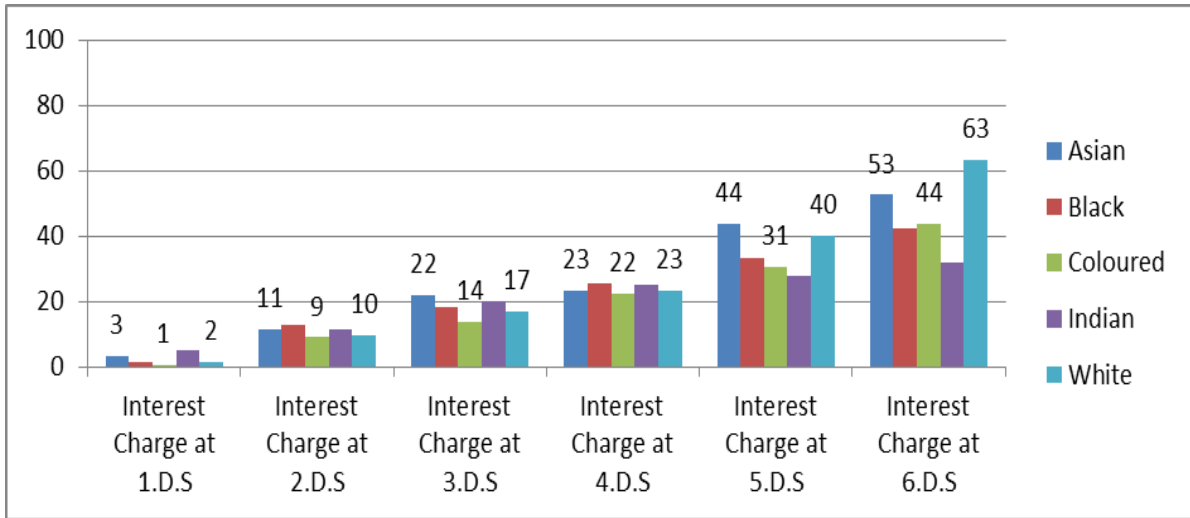


Figure 8.4 Interest charged by race

Even though Figure 8.4 shows that at the largest degrees of separation, white people would charge the most interest as compared to other races, Table 8.3 illustrates that the difference is not statistically significant, at a 95% significance level (p value greater than 0.05). This is the same at all D.S.

Table 8.3 ANOVA test for interest charged by race

Interest charged by race		
	F value	P value
Interest charged at 1DS	0.62	0.65
Interest charged at 2DS	0.19	0.94
Interest charged at 3DS	0.27	0.89
Interest charged at 4DS	0.05	0.99
Interest charged at 5DS	0.32	0.86
Interest charged at 6DS	0.6	0.66

8.2.3. Variables in lending

The next discussion points aimed to increase understanding of lender preferences with regards to specific borrower demographics. This discussion consisted of four distinct variables: race, gender, province and country. Focus group subjects were asked if they would lend to a person who was of a different race or gender, or who lived in a different province or country.

The results reveal that, generally, race and gender have no bearing on whom a lender would give a loan to when other risk factors such as income, credit history and age are constant. That means the risk profile of a lender is more indicative of lending activity than the race or gender of a borrower.

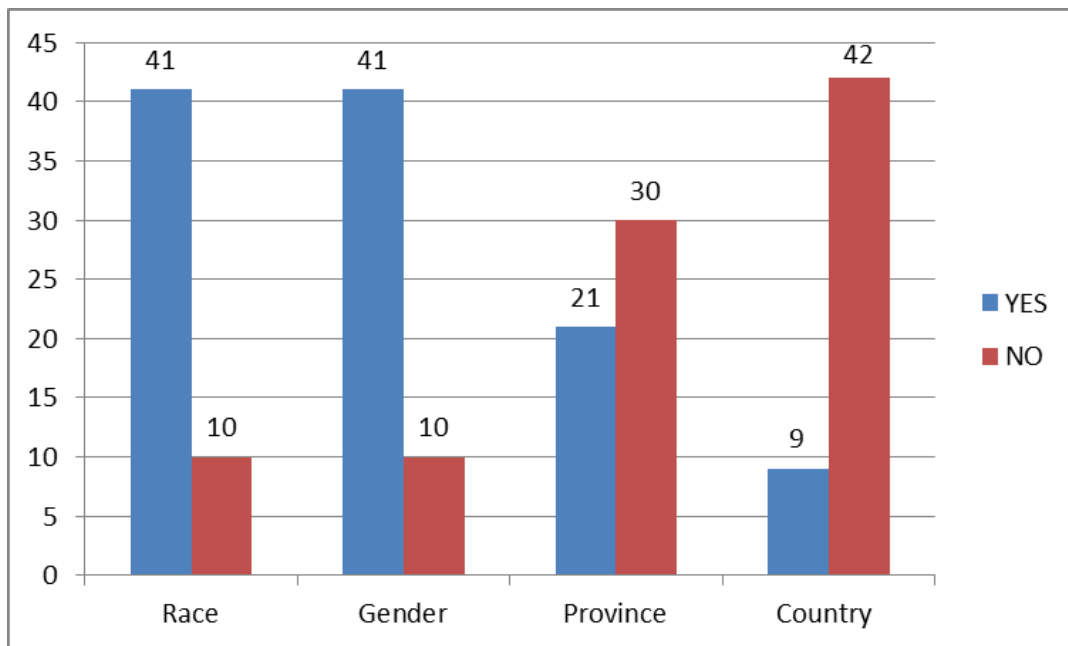


Figure 8.5 Willingness of lenders to lend given race, gender, province and country

Lending to a person in a different province showed a less positive trend, with 30 out of 51 focus group subjects saying this would dissuade them from providing a loan. Similarly, the majority of focus group subjects, 42, said they would not lend to borrowers outside their home country. The unknown elements and risks presented by a different province or country act as barriers to lending in a P2P transaction.

8.2.4. Interest charges and variables in lending

Focus group subjects were asked to provide an indicative interest rate they would charge on loans to people of different races and genders, and who lived in different provinces and countries. The results showed that people of a different race to the lender would, on average, be charged 19.5%, and borrowers of a different gender to the lender would be charged similarly at 18.5%. Borrowers

living in different provinces and countries would be charged 30.9% and 43.9% respectively, showing that higher perceived risks attract higher interest charges.

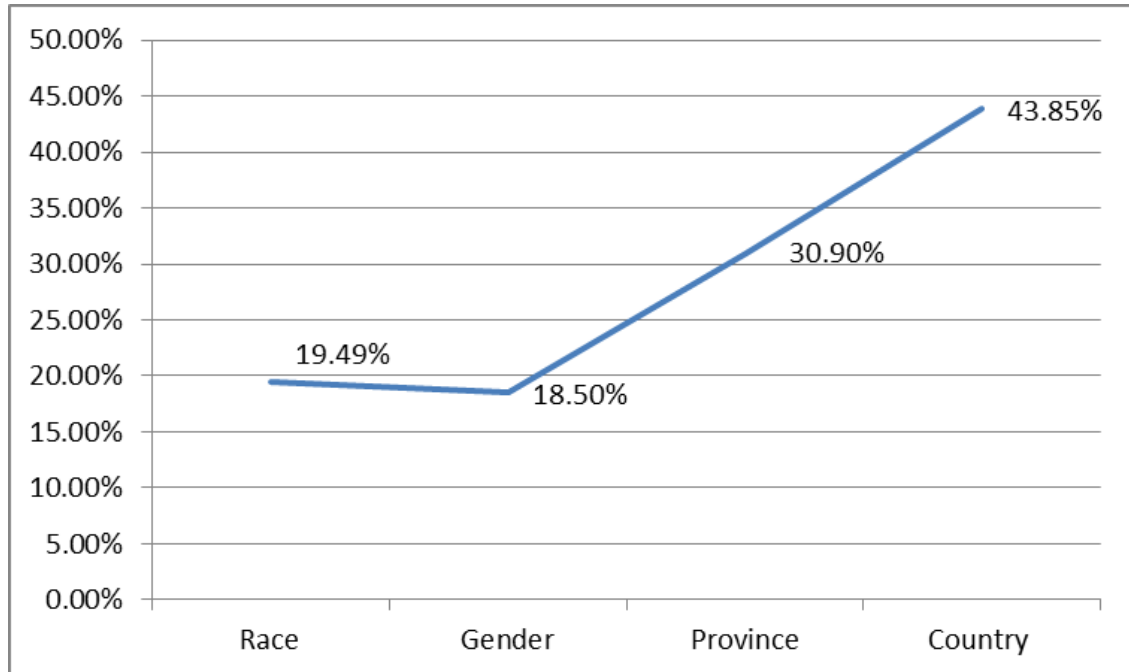


Figure 8.6 Interest charges given race, gender, province and country

8.2.5. Borrower preferences

The focus groups' discussion then turned to borrowing. Subjects were prompted by two questions that investigated borrower preferences with respect to privacy and loan sharing, and the peer pressure felt by borrowers for loans from different sources.

In terms of borrower preferences with respect to privacy and loans, 43 subjects said they required total secrecy about their loan agreements, whereas 8 said they would not require this. This has implications for P2P transactions in which loan agreements are not secret and the multiple lenders know the dealings of borrowers. This may be a hurdle in the implementation of P2P lending in South Africa.

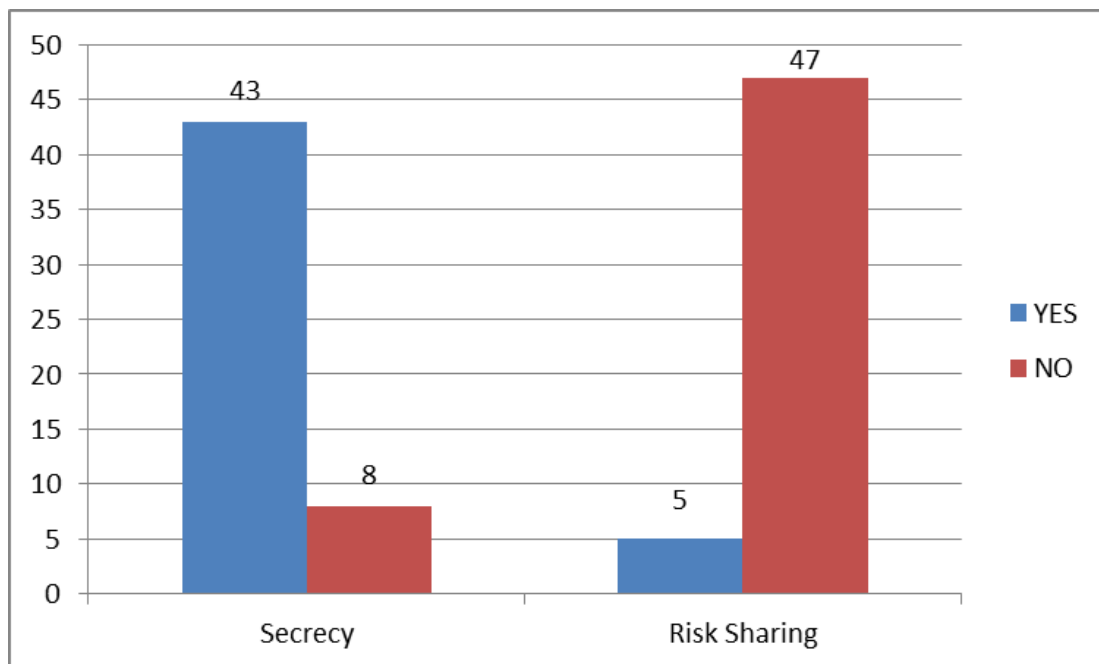


Figure 8.7 Borrower preferences regarding secrecy and risk sharing

The second focus group discussion point aimed to discover whether or not borrowers would be comfortable receiving a loan from 10 different sources – for example, R100 from 10 people instead of R1 000 from one person. The results are interesting. The vast majority, 47, said they would not be comfortable with such a risk-sharing arrangement. Perhaps the number of lenders is too high at 10, and a smaller number, say three or four, would be more suitable. Participants did not understand how it would work in practice.

These discussion points reveal potential barriers for borrower participation in a P2P transaction. A P2P facilitation platform would need to take these findings into account when developing its offering.

8.2.6. Peer pressure experienced

The last focus group discussion point looked at the peer pressure felt by borrowers from different sources. Focus group subjects were asked about the pressure they would feel to repay a loan if they received it from one of three sources: family and

friends, friends of friends, and someone they did not know. Subjects were asked to use a rating scale from 1 to 10, 1 representing the most pressure and 10 the least.

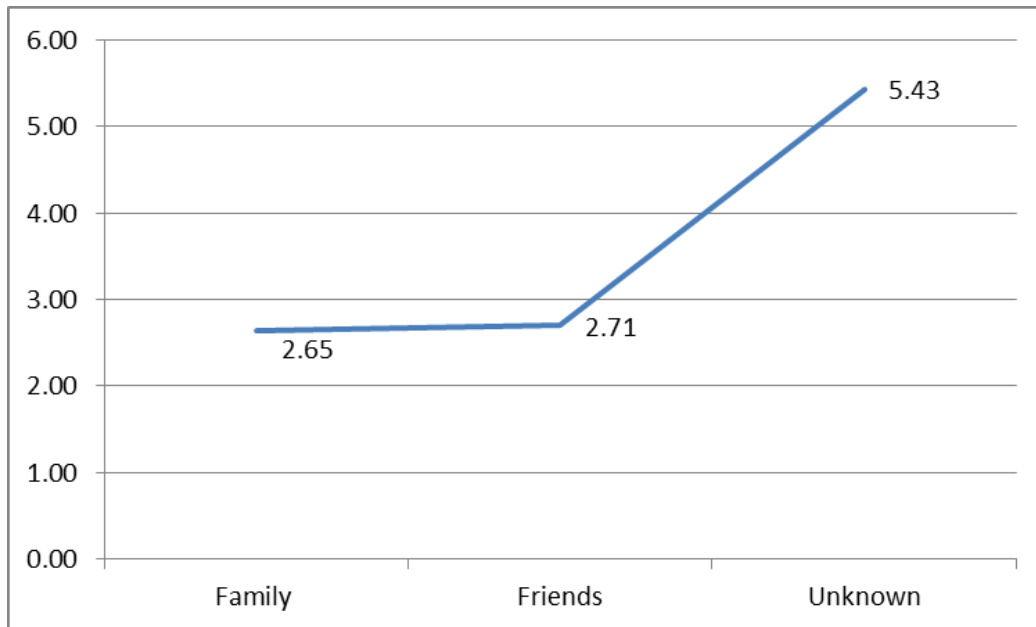


Figure 8.8 Peer pressure rating of loans from family, friends and unknown individuals

On average, focus group subjects would experience more pressure to repay a loan from family and friends, as well as friends of friends, than from someone they did not know. Family and friends were rated at 2.65 and friends of friends received a rating of 2.71. Loans from unknown people received a rating of 5.43, revealing substantially less pressure to perform on the loan.

8.2.7. Trust

During the focus group, trust appeared as a prominent concern. Most people explained that they would hesitate to engage in P2P lending because of a lack of trust, which stems from two areas: the lack of certainty that the borrower will repay the loan and the lack of trust in the P2P lending platform.

Lack of trust that the lender will repay the loan is essentially the risk of default, but this stems from the limited resources of the lender. Lenders in a P2P transaction have limited financial resources to lend – effectively, it’s their savings– so they are

far more cautious in lending. Their risk appetite appears lower than a registered credit provider's. Their trust in the borrower stems from behavioural underwriting and peer pressure. The sense from the group was that there is a deep mistrust that people would actually repay their debts.

The discussion of trust then moved to the concept of the P2P platform. Focus group subjects said they would need to trust that the P2P platform was performing its role of risk mitigation effectively. The groups touched on concepts such as oversight and regulations, and said the P2P platform would need to be registered with the likes of the NCR, the FSB or the South African Reserve Bank for them to trust it. The consensus among the group was that, like the South African banking industry, the P2P lending industry would need to be highly regulated and controlled for trust to exist among P2P users.

8.3. Conclusion

The most notable insight derived from the focus groups are: there is a definitive link between lending in a P2P transaction and the degrees of separation between the lender and borrower. As the degrees of separation between lenders and borrowers grow, so does the unlikelihood that the lender would lend to the borrower.

The further removed a lender is from a borrower, the higher the interest rate the lender would charge to compensate for the perceived risk because of a lack of behavioural underwriting and peer pressure.

Race and gender do not seem to have a significant effect on the decision to lend or not, but location does. If the borrower is located in another province or country, the likelihood that a P2P lending transaction will occur is remote. This is supported in the interest rates subjects would charge on P2P transactions with these variables.

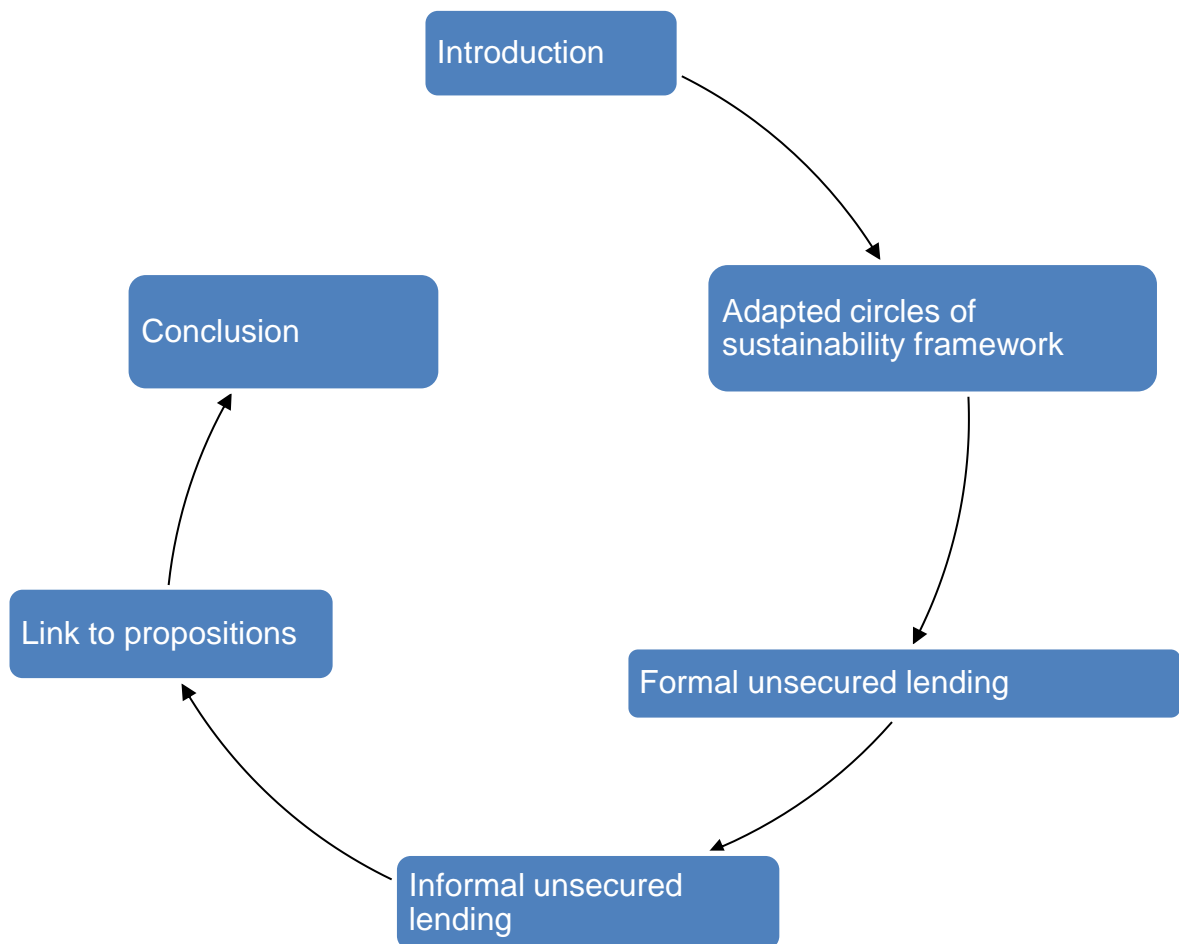
Most focus group subjects would require total secrecy in their loan dealings, a potential stumbling block with regards to P2P transactions. Risk sharing in a P2P transaction is also surprisingly seen as unfavourable.

Peer pressure is present in varying degrees in lending to family and friends, friends of friends and strangers. The majority of people revealed a significantly higher level of peer pressure to perform on loans between family and friends, and a much lower level of peer pressure to perform on loans with strangers.

Sustainability in unsecured lending occurs when there are low costs and high repayments. This is achieved through behavioural underwriting and peer pressure – in essence, disintermediation. The degrees of separation, and therefore the level of disintermediation between lenders and borrowers, have a direct bearing on sustainability. This may translate into a lower adverse selection of borrowers by lenders and a lower rate of moral hazard on behalf of borrowers.

The results suggest some readiness in both lenders and borrowers to take on P2P lending. However, specific antecedents need to be present to reveal this readiness. The type of the P2P lending may be limited, with factors such as interest rates, familiarity, loan type, and loan usage all playing a role. However, there seems to be openness to the concept and process of P2P lending.

Chapter 9: Research findings: Adapted circles of sustainability framework



9.1. Introduction

The objective of this chapter is to report on the adapted application of circles of sustainability framework, the experts' opinions of ratings, and the researcher's personal narrative observations. The adapted circles of sustainability framework was applied to formal and informal unsecured lending. Expert opinions inform the ratings and provide cases of formal and informal lending.

9.2. Adapted circles of sustainability framework

As discussed in Chapter 5, the adapted circles of sustainability framework involves the assessment of cities according to the United Nations' Global Compact Cities Programme, but replaces the assessment of ecology with a perspective on unsecured lending.

The UN conducted a circles of sustainability study on the city of Johannesburg, South Africa, in 2013. Four perspectives – economics, politics, ecology and culture – were rated by the organisation, and these ratings were used throughout the proposed adapted circles of sustainability framework. In this study, the ecology perspective has been replaced because of its inapplicability to unsecured lending. The modified unsecured lending perspective focuses on specific elements of unsecured lending. The unsecured lending perspective was assessed through three different lenses: formal unsecured lending, informal unsecured lending and P2P lending.

The application of the adapted circles of sustainability framework assessment followed a two-pronged approach. First, the researcher provided a personal assessment based on practical experience – a narrative study. Second, the researcher informed this assessment by collecting the same assessments from a number of unsecured lending practitioners. The average of the assessments was then used as the “ruling assessment” in the adapted circles of sustainability framework.

The proposed perspectives of the variable perspectives in the adapted circles of sustainability framework – comprising unsecured lending, economics, politics and culture – are listed in Table 9.1 alongside possible issues to consider. This is a repetition of Table 4.3 to allow the reader to easily follow the ratings and framework.

Table 9.1 Proposed perspectives to support the unsecured lending perspective of the circles of sustainability

Framework perspective	Perspectives	Possible issues to consider
Unsecured lending	<ul style="list-style-type: none"> • Financial cost • Opportunity cost • Moral hazard • Adverse selection • Loss incurred • Recourse • Access to further credit 	<ul style="list-style-type: none"> • Interest rates, fees and insurance • Development versus consumption credit • Choice to repay debts • Ability to repay debts • Shareholder value loss (lender) • Legal recourse to recoup debt • Blacklisting at credit bureaus

9.3. Application: Formal unsecured lending

The adapted circles of sustainability framework rated formal unsecured lending among unsecured lending practitioners in South Africa. An average was used as an indicator of sustainability.

Table 9.2 Adapted circles of sustainability framework rating for formal unsecured lending

1	2	3	4	5	6	7	8	9
Critical	Bad	Highly Unsatisfactory	Satisfactory ⁻	Satisfactory	Satisfactory ⁺	Highly Satisfactory	Good	Vibrant

Framework perspective	Perspectives	Researcher rating	Expert rating (range)	Deviation
Formal unsecured lending	1. Financial cost	4	5	+1
	2. Opportunity cost	3	4	+1
	3. Moral hazard	5	5	0
	4. Adverse selection	3	4	+1
	5. Loss incurred	6	4	-2
	6. Recourse	5	5.5	+0.5
	7. Access to further credit	5	5	0
	Averages	4.43	4.64	+0.21

To remain focused on the subject of this research, the other three perspectives – economics, politics and culture – are assumed to remain constant, therefore the only variable that is used to determine sustainability is the unsecured lending perspective.

The expert reviewers are professionals in consulting companies and banks. These were:

- a managing director of a financial advisory firm;
- a managing director of a credit provider;
- a chief executive of an unsecured lending data aggregator; and
- a vice-president of lending fraud at a “big four” bank.

The expert reviewers voluntarily participated in rating the unsecured lending industry using their experience and knowledge while utilising the adapted circles of sustainability framework.

9.3.1. Discussion: Formal unsecured lending framework perspectives

9.3.1.1. Financial cost perspective

The first perspective of unsecured lending considers subcategories specific to the lender, borrower and government. Financial costs are rated by the researcher as satisfactory minus (4), and by the experts as satisfactory (5). The ratings come from the scale illustrated in Table 9.2. Although interest rates are in line with international norms, monthly administration fees and initiation fees push up the total cost of credit or APR. Added to the cost burden are the payments of credit life insurance premiums. Both ratings mirror the perceptions of survey respondents and focus group subjects that the financial cost of formal unsecured credit is burdensome. This weighs on the borrower and hinders their ability to repay their debts. Results from Chapter 7 also reveal a perception that credit providers charge too much, and this provides an opportunity for P2P lending to compete with traditional lenders (see section 7.3.14).

9.3.1.2. Opportunity cost perspective

The cost of consumer credit is the opportunity cost of giving up a liquid asset. Some consumers who have personal loans at high annual percentage interest have a high opportunity cost (Durkin *et al.* 2014). Borrowers in South Africa generally use unsecured debt to fund consumption purchases – a negative wealth-creating act, which in the long term is very expensive. The researcher and experts rated this perspective as 3 and 4 respectively. It's worth noting that the rating of the financial cost perspective was higher (more sustainable) than the ratings given by the researcher and experts for the opportunity cost perspective. This may

indicate that the opportunity cost a borrower experiences when taking out a formal unsecured loan is substantial.

When comparing the ratings of the framework to the survey, 29.4% of borrowers from the survey indicated that they use a combination of developmental and consumption loans, and 8.7% of borrowers use only consumption-driven loans. The opportunity cost of their consumption loans outweighs the opportunity cost of developmental loans, and therefore there is a higher opportunity cost of consumption-driven loans. Generally, unsecured loans are used for consumption purposes.

9.3.1.3. Moral hazard perspective

The subcategory of moral hazard was rated as satisfactory (5) by the researcher, and received the same rating by the experts. The concept of moral hazard is implicit in a borrower's choice, not ability, to repay their debts. Borrowers may be able to pay but choose not to. Moral hazard is also linked to the pressure a borrower feels to repay their debts. Both ratings identified this as a marginally sustainable category, which raises concerns that borrowers face a choice to repay their debts

9.3.1.4. Adverse selection perspective

Adverse selection was rated as highly unsatisfactory (3) by the researcher, and as satisfactory minus (4) by the experts. Lenders are incentivised to sell more and more loans to achieve higher profitability, and, as a result, their lending criteria are lower or frequently adjusted to generate further loan revenues. Borrowers who should not receive loans get them with only a marginal ability to repay. It may not be the borrower's choice to repay their debts or not, but a question of which debt to repay first and which ones to skip payments on. Evidence for this is provided in the levels of household debt to income in South Africa – 74.7% (SARB 2012) – a factor considered in both sets of ratings.

9.3.1.5. Loss incurred perspective

Losses are also incurred by lenders who provide credit to borrowers who would be considered high risk, as determined by the NCA. The losses are directly borne by the shareholders of the lender (Popli & Puri 2013). However, these expected losses have already been priced into the loans, with the performing borrowers subsidising the non-performing ones. The researcher rated this category as satisfactory plus (6), and the experts as satisfactory minus (4). The reason for the significant difference is that, as the experts explained, the losses felt in the market outstrip the expected losses already priced into new loans due to the current unfavourable economy.

9.3.1.6. Recourse perspective

In the case of default, a lender's recourse received a satisfactory rating by both the researcher (5) and experts (5.5). Recourse looks at the blacklisting of defaulting borrowers at bureaus, the legal proceedings available, the possibility of an emolument attachment order facilitation, and asset repossession. Although in South Africa these proceedings are costly, the legal framework has been constituted and it's readily available to lenders. Both ratings reflect the challenges faced by South African lenders with respect to the protracted legal recourse.

9.3.1.7. Access to further credit perspective

Access to further credit is linked to the credit behaviour of the borrower, and looks specifically at the size and timing of the instalment repayments. If a borrower defaults on a debt contract and is blacklisted at a credit bureau, not many formal lenders will provide further credit to that borrower. The researcher and expert ratings were both satisfactory (5) for this category.

9.3.2. Outcome: Formal unsecured lending aggregate score

The minimum level or aggregate score required for sustainability is 5, which is needed to ensure at least a basic level of equilibrium over the short term. The researcher's ratings used the adapted circles of sustainability framework for unsecured lending, and produced a score of 4.43 (below the minimum sustainability score). Expert reviewers scored the formal unsecured lending perspective at 4.64. The expert rating yielded the same conclusion as the sustainability levels of the formal unsecured lending industry, albeit closer to the sustainability benchmark of 5.

The formal unsecured lending score is important as it links to what is happening in the industry. Government seems to intervene in the unsecured lending industry every seven years or so with a variation of amnesties that essentially rewrite the rules of the industry. Over the short term, government is required to intervene to ensure the sustainability of the market. It is telling that in this regulated and formal market, government chooses to intervene to ensure sustainability and continuance, whereas a specific informal unregulated form of unsecured lending (stokvels) has never required any intervention.

9.4. Application: Informal unsecured lending framework perspective

The adapted circles of sustainability framework was applied to the informal unsecured lending market (stokvels) among unsecured lending practitioners in South Africa, and an average was used as an indicator of sustainability (see Chapter 5). The researcher and expert ratings considered informal credit from loan sharks to stokvels. There is a significant difference between these types of lenders, but all efforts were made to exclude illegal predatory lending practices such as loan sharks from the ratings. This does not negatively affect the validity of the ratings, but merely informs the context and background to the viewpoints of the researcher and experts.

Table 9.3 Adapted circles of sustainability framework for informal unsecured lending

1	2	3	4	5	6	7	8	9
Critical	Bad	Highly Unsatisfactory	Satisfactory ⁻	Satisfactory	Satisfactory ⁺	Highly Satisfactory	Good	Vibrant

Framework perspective	Perspectives	Researcher rating	Expert rating (range)	Deviation
Informal unsecured lending	1. Financial cost	5	4	-1
	2. Opportunity cost	4	5	+1
	3. Moral hazard	7	5.5	-1.5
	4. Adverse selection	7	5.5	-1.5
	5. Loss incurred	4	4	0
	6. Recourse	4	5	+1
	7. Access to further credit	4	4	0
	Averages	5.00	4.71	-0.29

9.4.1. Discussion: Informal unsecured lending framework perspective

The first perspective of unsecured lending considers subcategories specific to the lender-borrower relationship. Being informal, government does not sanction or prescribe regulations in this sector, but it does encourage it to move into the formal economy.

9.4.1.1. Financial cost perspective

Financial costs were rated as satisfactory (5) by both the researcher and the experts. Within the context of stokvel lending, the costs associated with credit are less than with formal lenders. However, the cost of credit is not governed by legislation such as the NCA, and is open to misuse by stokvel members. Having said this, there is a strong community element present within stokvels that fosters trust and a willingness to help fellow community members when the need for credit arises. This resulted in a satisfactory minus (4) rating by the experts, and a satisfactory (5) rating by the researcher.

9.4.1.2. Opportunity cost perspective

The opportunity cost attached to consumption credit is high. However, the sizes of stokvel loans are generally smaller than those available at formal lenders, so it can be assumed that the negative wealth impact is felt less with smaller consumption loans.

Generally, loans from stokvels are used for specific cases, such as housing, education and family emergencies. The decision to borrow from stokvels is not taken lightly, and borrowers generally do not use their credit frivolously. Both the researcher and expert ratings were higher than the formal unsecured lending rating – 4 (satisfactory minus) and 5 (satisfactory) respectively – noting a lower opportunity cost associated with this form of unsecured credit.

9.4.1.3. Moral hazard perspective

The subcategory of moral hazard received a highly satisfactory (7) rating by the researcher, as there is thought to be high peer pressure to perform in terms of loan repayments. Peer pressure is exerted on each community member, and members are encouraged to be financial disciplined, responsible and to commit to the group so as to maintain their reputation (Mashigo 2011). Even in cases when the level of household debt is overwhelming, stokvel members would find

resources to perform on their stokvel loan, even if this means borrowing further from formal institutions. Expert ratings viewed moral hazard as satisfactory (5.5) and sustainable according to the framework

Findings from the survey revealed that 62% of respondents said they would feel more pressure to repay a loan to a friend or family member. This corresponds positively with the theory that P2P lending induces a higher level of peer pressure.

9.4.1.4. Adverse selection perspective

Adverse selection received a rating of highly satisfactory (7) by the researcher, as borrowers are subjected to strict behavioural underwriting rules before a loan is granted. Expert ratings viewed this as satisfactory (5.5) and sustainable according to the framework. The stokvel vets each borrower based on their stokvel behaviour and membership, including direct and indirect interactions, over an extended period. The community assesses the borrower's behaviour from various data sources including family activity, contribution to the community, good parenting, and the reputation of the family. In understanding a person on such as granular level, the probability of lending to a defaulting individual lessens. Adverse selection decreases because of the granular nature of data included in the credit decision.

9.4.1.5. Losses incurred perspective

Any losses incurred through credit provision in a stokvel negatively affect the other members of the stokvel. These are not wealthy shareholders that can absorb losses but working class individuals with limited financial resources. The risk is large, and therefore a rating of satisfactory minus (4) was awarded by both the researcher and the experts.

Losses experienced by informal savings groups are devastating to each contributing member, as these funds represent their savings and minimal disposable incomes. This is a defining and critical factor with regards to P2P lending; most individuals are generally risk averse with their savings and

disposable income, and perceive loans to relatively unknown individuals as highly risky. This – a lack of trust between lenders, borrowers, and the intermediary – confirms a potential barrier to P2P identified in both the survey and focus group.

9.4.1.6. Recourse perspective

Recourse in the case of a default within a stokvel is limited to actions outside the sphere of influence of regulations such as the NCA. This is an informal credit agreement and protection for the lender and borrower is not provided under the NCA. However, the informal recourse for default within a stokvel is effective. The stokvel can expel a non-performing member and attach an unwanted social stigma to that person. This recourse comes from within the community in which the borrower lives and is effective in stemming defaults.

The experts ranked the recourse as satisfactory (5), whereas the researcher ranked it as satisfactory minus (4). Informal recourse seems to be more of a deterrent to defaulting on a credit agreement than formal recourse, seemingly because of its public nature.

9.4.1.7. Access to further credit perspective

Access to further credit is severely hampered within the informal market if a borrower has already defaulted. The social knowledge of the defaulter is abundant, and no other informal lenders will provide further credit to that borrower, who would then have to turn to the more expensive option of formal credit.

The researcher and experts both rated this element as satisfactory minus (4), as stokvel members would not provide further credit to a defaulting member. Even if this member repaid their debts, they would be eligible for further credit only once trust is regained through their behaviour.

9.4.2. Outcome: Informal unsecured lending aggregate score

The minimum score required is 5 to ensure at least a basic level of equilibrium for sustainability over the short term, and the adapted circles of sustainability framework for informal unsecured lending produced this score (see Table 9.3). This is important, as it reveals that informal unsecured lending is marginally more sustainable than formal unsecured lending, although the size of the loans is considerably smaller than formal unsecured loans.

Expert reviewers scored the informal unsecured lending perspective 4.71 and formal unsecured lending 4.64 – both below the minimum sustainability threshold of 5. Noting a slight difference between scores from the experts, the following comparison is provided between the experts' ratings of formal and informal unsecured lending.

Table 9.4 Differences in expert ratings between formal and informal unsecured lending

1	2	3	4	5	6	7	8	9
Critical	Bad	Highly Unsatisfactory	Satisfactory ⁻	Satisfactory	Satisfactory ⁺	Highly Satisfactory	Good	Vibrant

Framework perspective	Perspectives	Expert rating (formal)	Expert rating (informal)	Difference
Unsecured lending	1. Financial cost	5	4	-1
	2. Opportunity cost	4	5	+1
	3. Moral hazard	5	5.5	+0.5
	4. Adverse selection	4	5.5	+1.5
	5. Loss incurred	4	4	0
	6. Recourse	5.5	5	-0.5
	7. Access to further credit	5	4	-1
	Averages	4.64	4.71	-0.07

The researcher discussed the ratings with the experts to understand the thought processes and reasonings behind their ratings.

Financial costs were rated worse in informal lending than formal lending, as experts felt that within an unregulated market (even within a stokvel or closed community group), exorbitant rates are applied to borrowers with no maximum rate caps.

Opportunity costs were rated higher by the experts as they felt that there was less of an opportunity cost associated with informal lending. The experts rated this dimension as 5, suggesting they perceive it to be sustainable.

The experts' ratings for moral hazard and adverse selections both improved in the ratings for informal lending. Moral hazard deviated less than adverse selection

because of the experts' view that, within informal lending, individuals who need to borrow from their communities are in the same predicament as the community. For example, a low-income individual borrowing from their low-income community would face a higher degree of peer pressure to repay the debt. The experts agreed that the adverse selection would improve because of the granular details the lenders know about the borrower.

Interestingly enough, experts rated the loss incurred the same as the researcher. When asked about this, they noted that individuals would suffer directly in the event of a default within informal lending. However, within formal lending, the loss is felt indirectly, and shareholders feel a default less acutely than individual lenders.

Recourse in the case of a default was rated 0.5 points lower by experts, as an informal credit agreement has limited or no legal recourse. The experts approached this from a social and legal standpoint and viewed it as satisfactory overall.

Access to credit in informal lending was rated 1 point lower by the experts, who reasoned that once an individual is forced to borrow informally, they generally have an existing impaired credit record. This is not necessarily the case, but it is the perception of the experts. In the event of a default within informal lending, individuals are faced with limited financial and credit choices, if any. This is not always the situation, as the findings of the survey (see section 7.3.1) show that individuals use a range of credit products both formally and informally.

Overall, the experts rated informal lending 0.07 points higher than formal lending, but, critically, within the same outcome band of satisfactory minus (4).

9.5. Conclusion

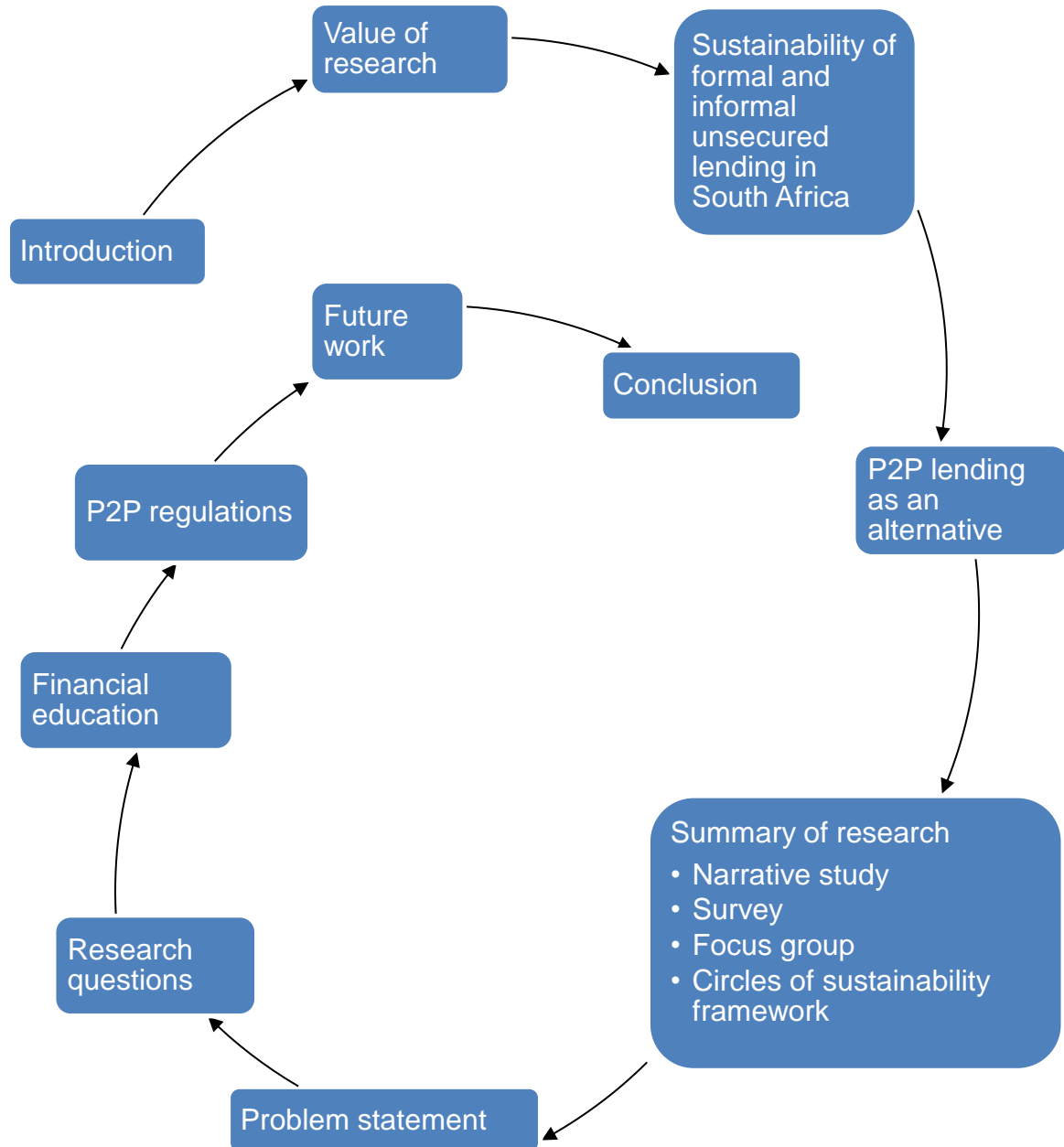
This chapter applied the adapted circles of sustainability framework to formal and informal unsecured lending. The application was based on the adapted

perspective of unsecured lending, which replaced the ecology perspective in the traditional framework.

The researcher's outcome of the formal rating was 4.43 and the expert rating was 4.64 – both less than the sustainability outcome of 5. The researcher's outcome for the informal rating was 5, whereas the experts' rating was an average rating of 4.72.

It is important to note that the framework gives definite direction, and is useful to measure and evaluate the sustainability of unsecured lending, both formally and informally, despite its shortcomings.

Chapter 10: Discussion, conclusions and future research



10.1. Introduction

The purpose of this chapter is to provide a comprehensive conclusion and summary of the main findings; limitations and recommendations for future research are also specified.

Firstly, the argument structure is revisited.

Unsecured lending could be more sustainable when there are:

1. higher repayment levels or, conversely, lower default levels; and
2. a lower cost of credit.

This may mean:

1. a reduction of adverse selection. This involves lenders lending to borrowers who have the ability to repay the loan (essentially an information asymmetry equalisation); and
2. a reduction of moral hazard. This entails borrowers choosing not to repay a debt even though they have the ability to repay (essentially a positive performance producing social contract).

This could be achieved through:

1. behavioural underwriting (relates to adverse selection):
 - a. a system where lenders intimately understand the behaviours of borrowers over time, and so develop an intimate idea of their credit comportment;
 - b. to lower adverse selection; and
 - c. to lower the cost of credit.

2. peer pressure between lenders and borrowers (relates to moral hazard):
 - a. to make sure there is pressure to perform because of a social contract and the stigma attached to non-performance;
 - b. to lower moral hazard; and
 - c. to lower default levels.

The aim of this dissertation is to establish:

1. whether behavioural underwriting results in a:
 - a. lowering of adverse selection; and
 - b. lowering of the cost of credit.

2. whether peer pressure results in a:
 - a. lowering of moral hazard; and
 - b. lowering of default levels.

Resulting in: higher repayment levels and a lower cost of credit.

Argument:

- Peer-to-peer lending inherently contains both peer pressure and behavioural underwriting.
- Peer-to-peer lending reduces asymmetry of information and increases positive performance of social contracts.
- Peer-to-peer lending could be seen as a sustainable alternative to traditional unsecured lending.

10.2. Value of research

As discussed in Chapter 1 of this study, the value of this research is potentially both scientific and economic, and looks at the following::

1. sustainability;
2. demonstration of a concept;
3. economic value;
4. wealth creation strategies;
5. economic growth policies;
6. poverty alleviation strategies; and
7. addressing inequality.

10.3. The sustainability of formal and informal unsecured lending in South Africa

A large portion of this research focused on formal and informal unsecured lending practices in South Africa, and assessed their respective sustainability levels against a framework adapted to measure this market.

The primary focus identified the participants of an unsecured lending transaction, which included lenders, borrowers and the government in the form of the NCR. These participants in an unsecured lending agreement were introduced and discussed at length.

10.4. Peer-to-peer lending and its use as an alternative to traditional unsecured lending in South Africa

The study focused extensively on every aspect of P2P lending, both in the formal and informal sectors. Peer-to-peer lending addresses both adverse selection and moral hazard through behavioural underwriting and peer pressure. These are the natural benefits of the disintermediation of the lending process. The result is a decrease in credit costs and an increase in loan repayments. Peer-to-peer lending disintermediates the lending process through the dissemination of information between lenders and borrowers, and breaks down the asymmetry of information between loan participants.

It offers a workable solution that utilises behavioural underwriting and peer pressure to produce loans that are reasonably priced and carry exceptionally high repayment rates. But it differs from the non-profit KIVA model in that lenders are motivated by dual objectives of profit-making and social bonds.

A disadvantage of P2P lending is that the risk of default is held by individuals and not companies. Peer-to-peer lenders spread their risk of default across a number of borrowers, which makes the size of the defaults far smaller. The amount lost in the event of a default is significantly lower than traditional lenders would face because a large number of borrowers (not just one credit provider) contribute smaller amounts towards one loan. This could depress savings and further credit extension from these lenders in the future. Peer-to-peer lending may yield a more sustainable approach to unsecured lending than either for-profit or not-for-profit institutional lenders.

10.5. Research results for peer-to-peer lending in South Africa

This section summarises the major findings of each investigation point: the narrative study, survey, focus group and circles of sustainability framework.

10.5.1. Research results: Narrative study

The narrative study comprised a the personal narratives of three distinct interest groups: lenders, borrowers and regulators. Below are the themes that emerged from the autoethnographic study of borrowers, lenders and regulators.

The borrower's narrative revealed that John Matsuma and his wife used loans largely for consumption purposes, and experienced the typical buyer's remorse associated with consumption loans. Credit offers are constantly available in their environment, but they do not fully comprehend the long-term or total cost of credit. The monthly repayments ultimately make it difficult to make ends meet each month, an unsustainable position.

The lender's narrative reveals a constant pursuit of loan volumes at the cost of risk considerations, usually to meet targets propelled by shareholder returns.

The NCR was found to be stuck between seemingly conflicting and opposing objectives: consumer protection and managing market forces. The regulator is making progress with amendments to the National Credit Amendment Act, but the short-term impact of the credit amnesty in 2007 has resulted in consumers who were bailed out being back in default. Data from the 2014 amnesty is expected to yield a similar outcome.

10.5.2. Research results: Survey

This section aims to review prominent results emerging from the survey. Lender-orientated questions revealed evidence in support of P2P lending in the following ways:

1. Most respondents saved money monthly, but earned a low return. Peer-to-peer platforms can take advantage of this by offering a higher-yielding asset class for savers with investments.
2. More than 90% of respondents used online banking and had made online purchases within the past 12 months, demonstrating online transaction experience and comfort.
3. More than 57% of respondents had given a loan to a friend or family member, and most had not experienced a default on these loans. This provides evidence that informal P2P transactions are already happening.
4. 66% of respondents would give a loan to fund an educational endeavour, and would be encouraged to lend with the goal of earning returns in excess of 20%.
5. More than 63% of respondents said that they would be comfortable sharing the risk of lending among a number of borrowers.

Borrower-orientated questions revealed evidence in support of P2P lending in the following ways:

1. Just less than 50% of the respondents said they had taken consumption loans. Just less than 30% said they used a combination of developmental and consumption loans.
2. Just more than 40% of respondents said they would or had used the internet to apply for loans.
3. One-third of respondents said they would consider taking out a loan from an individual, and 88.4% of respondents who took out loans at registered credit providers said they would consider taking out a loan from an individual.
4. The borrowers' major concern was the cost of the loan. Peer-to-peer lending lowers the cost of credit and offers an attractive alternative for these respondents.
5. More than 58% of respondents said they would consider switching their loan for a cheaper loan, and 53% said they would take out a loan from a family member or friend if it was cheaper.
6. 62% of respondents said they would feel more pressure to perform on a loan if it were from a family member or friend.
7. More than 80% of respondents said they felt that banks and other credit providers charge too much for their loans. This provided further evidence and support for alternative low-cost lenders.

10.5.3. Research results: Focus group

The second phase of data collection and analysis involved focus group discussions, which were conducted to validate the results revealed from the online survey. The focus groups comprised two separate groups – the first consisted of 12 members and the second contained 39, making the total 51. It is critical to mention that none of the focus group members had taken the online survey or been exposed to any of the questions.

The outcome of the focus group informed the following:

1. The degree of separation between individuals has a material impact on the interest rate charged within P2P transactions.

2. Variables such as race, gender, province and country affect lending decisions, as well as the interest rates attached to those decisions.
3. Generalised borrower preferences with respect to privacy and loan sharing.
4. Peer pressure is felt by borrowers about their loans from different sources.

Prompts were used to direct the focus group discussions (see Appendix B).

The first part of the discussion focused on the lending activities of the focus group members. The first two items from the list above were tested. The groups were asked two questions regarding lending to people within a specific degree of separation.

The focus group discussions revealed evidence in support of P2P lending in the following ways:

1. The further away a borrower is in terms of degrees of separation from the lender, the less likely the lenders would be to lend to them.
2. The relationship between the degree of separation and the interest rate charged is a positive one. The higher the degree of separation, the higher the interest rate charged.
3. The results revealed that, generally, race and gender have no bearing on lender attitudes, but there is a price differential present, implying that the risk profile of a lender is more indicative of lending activity than the race or gender of a borrower. Lending to a person in a different province or country attracted more criticism, with the majority of focus group members saying they would not be willing to lend to such borrowers. This highlights a limitation of P2P lending across provincial or national borders.
4. The results show that people of a different race to the lender on average would be charged 19.5% interest, but borrowers of a different gender to the lender would be charged slightly less at 18.5%. Borrowers living in different provinces to the lenders would be charged on average 30.9%, and

borrowers living in different countries 43.9%. This again validates that unknown or higher perceived risks attract higher interest charges. Peer-to-peer lending attempts to circumvent these unknown variables, as participants in P2P transactions are usually familiar with one another's circumstances, and therefore physical distance is less of a barrier to lending.

5. On average, focus group members said they would experience more pressure to repay a loan from a family member or friend, as well as friends of friends, than someone they did not know. Family and friends received a rating of 2.65 out of 10, denoting a high peer pressure; friends of friends received a rating of 2.71 out of 10, denoting slightly lower peer pressure; and loans from unknown people received a rating of 5.43 out of 10, revealing significantly lower peer pressure and therefore less pressure to perform on loans.

The results seen from both the online survey of 1 121 people (Chapter 7) as well as the focus group of 51 members (Chapter 8) validate the sustainability argument discussed previously in this study, which stated that unsecured lending is sustainable when there are low costs and high repayments. This is achieved through behavioural underwriting and peer pressure – in essence, disintermediation. The degree of separation between lenders and borrowers has a direct bearing on this sustainability, and P2P lending reduces the effect of degrees of separation between lenders and borrowers.

10.5.4. Research results: Adapted circles of sustainability framework

A sustainable unsecured lending transaction and its attributes were defined. This described the need for sustainability within the unsecured lending industry by defining sustainability and investigating sustainability attributes such as cost and repayment. The sustainability framework used by the UN was introduced using the circles of sustainability approach. Although this model is used by the organisation

to manage urban city development projects towards sustainable outcomes, it was adapted to measure the South African unsecured lending market and labelled the adapted circles of sustainability framework.

Subsequently, the formal lending environment in the context of the adapted sustainability framework was considered by looking at the internal and external factors that influence and shape formal unsecured lending operations. The adapted circles of sustainability framework was applied to the formal unsecured lending industry by measuring four elements: unsecured lending, economics, politics and culture. The ratings of economics, politics and culture were borrowed from the UN's assessment of Johannesburg, and remained constant. The formal unsecured lending industry was scored 4.32 and 4.84 by the researcher and experts respectively on the adapted circles of sustainability framework outcome. This is below the minimum sustainability score of 5.

The adapted circles of sustainability framework was also applied to the informal lending environment, specifically stokvels, in South Africa. This was conducted within the context of a sustainability framework that considered internal and external factors in this market. The focus centred on how these informal groups use behavioural underwriting and peer pressure to achieve low costs and high repayments. It was discovered that this was as a result of disintermediation, which is crucial to sustainability within unsecured lending as it eliminates the middleman in a transaction, and passes on the cost savings and information asymmetries to the end consumer, thus reducing the cost burden.

The investigation then applied the adapted circles of sustainability framework rating for informal unsecured lending, and produced a score of 5 and 4.72 by the researcher and experts respectively. The minimum score for sustainability is 5.

The outcome revealed that the formal unsecured lending market is slightly less sustainable than the informal unsecured lending market in the form of stokvels.

10.6. The problem statement

Unsecured lending is growing and the existing model rather appears more unsustainable. Peer-to-peer lending might address some shortcomings if it is developed as an alternative model. As there has been insufficient research into P2P lending, knowledge of its sustainability as an alternative to traditional unsecured lending in South Africa is required; this is the focus of this study.

10.7. Research questions answered

The study posed four research questions, the answers to which are provided below.

10.7.1. Research Question 1

Does the existence of peer pressure result in lower moral hazard and lower default levels?

The existence of peer pressure within a credit transaction increases when participants are familiar with one another. Borrowers in a P2P transaction feel more peer pressure to perform on the loan and repay their debt compared to those borrowing from a financial institution. The increased performance reduces default levels to some extent.

10.7.2. Research Question 2

When lenders and borrowers have the ability to perform behavioural underwriting, does this result in fewer instances of adverse selection and lower cost of credit?

When lenders and borrowers are familiar with one another, they have the unconscious ability to perform intimate behavioural underwriting. This is intrinsic credit vetting or credit scoring, and reduces adverse selection of borrowers by lenders. Through this process, lenders levy a lower cost of credit to their familiar credit-worthy borrowers.

10.7.3. Research Question 3

To what extent are peer pressure and behavioural underwriting present in P2P lending versus traditional unsecured lending?

Behavioural underwriting is present to some extent when banks only consider the financial activities of borrowers in scoring their ability to repay debt. However, peer pressure is limited as there is a separation between the lender and borrower. Within P2P lending, there is a higher degree of peer pressure and behavioural underwriting because of the limited degree of separation between lenders and borrowers.

10.7.4. Research Question 4

What are the limitations associated with P2P lending in South Africa derived from this study?

Lenders and borrowers have a trust barrier to P2P lending in the sense that it uses a platform to facilitate loans between lenders and borrowers. This fits in perfectly with the data collected – the further away the lender is from the borrower, the more hesitant P2P lenders become – so there needs to be some form of guarantee presented to the lenders that reduces their risk; for instance, that the platform participates in loans.

Legislation forces P2P platforms in South Africa to work around deposit-taking regulations that in turn may make the platform's operations inefficient and costly.

10.8. Financial education gap

There is definite need for financial education within both the formal and informal P2P lending sectors in South Africa. This pertains to the intricacies of the transaction, especially with regards to risk management, pricing and collections.

There may be a shift within friendship groups, social clubs, communities, churches and employers to warm to the idea of unsecured lending in a P2P-style

arrangement. For example, an overarching body that offers credit to its members exclusively at low or near zero costs in an effort to assist borrowers to get out of debt. This is a critical development in P2P lending, as these overarching bodies within closed groups have the same criteria for lending as individual P2P lenders. They use behavioural underwriting, exert peer pressure and have a limited degree of separation. These advantages are present within closed-group P2P lenders, but they often lack lending expertise.

Social groups of P2P lenders or overarching bodies don't necessarily understand the dynamics of lending such as interest calculations, collections, funding, the legalities of lending and the like. This means that closed-group P2P lenders would require assistance in the form of education, technical expertise and management, and would require or create demand for financial education and training in the field of P2P lending. Greater P2P financial education would reduce the trust barrier experienced by participants.

10.9. Peer-to-peer regulations

There are deposit-taking regulations in South Africa contained in the Banks Act that restrict organisations' abilities to attract and accept deposits from the public. According to the Banks Act, P2P platforms are seen to accept and pool deposits to channel funds from lenders to borrowers. Compliance with the Banks Act requires onerous capital, which significantly erodes the benefits of P2P lending.

For P2P platforms to flourish, they need to be allowed to apply for an exemption to the Banks Act. This will still require compliance from the platform, but to a lesser extent. The would:

1. allow an industry to grow within a supervised environment; and
2. foster an environment where lenders and borrowers begin to trust the P2P lending process.

10.10. Study limitations

The study's limitations include:

- The narrative is limited to the researcher's experience within unsecured lending.
- The survey was performed online, which may have excluded some participants. It is still, however, judged to be a random sample, and participants are deemed to have met the minimum criteria.
- The focus group sizes were determined by the scheduling constraints of banking professionals.
- The sustainability ratings used an adapted circles of sustainability framework to provide direction.
- There was no actual P2P experiment or demonstration.

These limitations were largely a result of the specialised nature of the research topic. Participants who were surveyed needed to be only credit-active clients, or at least eligible to access credit, to add value to the survey. The focus group required banking professionals who intrinsically understood the risk of lending to evaluate P2P as a viable concept. The expert ratings required professionals to evaluate the sustainability of both formal and informal unsecured lending. An actual P2P demonstration would be extremely costly to run.

These limitations guided the researcher to make specific choices about data collection for the study. In the future, some of the limitations could be overcome by:

- including narratives from a diverse set of researchers;
- including hard copy survey responses from an audience that isn't only online; and
- testing and demonstrating P2P lending on a broad scale using actual unsecured lending transactions and participants.

10.11. Future work

Future studies within the P2P environment could include innovations such as:

- Peer-to-peer secured lending
- Peer-to-peer asset insurance (short and long term)
- Peer-to-peer medical or health insurance
- Peer-to-peer money transfer or remittances
- Peer-to-peer mobile money/wallets lending
- Poverty reduction through individual P2P portfolio management

Future work should also include a study into P2P financial activities across low-, middle- and high-income communities. The above aspects within a broader P2P finance industry require the same degree of inquiry as this study into unsecured P2P lending.

10.12. Conclusion

Peer-to-peer lending may be seen as a viable alternative to unsecured lending in South Africa because of the benefits of disintermediation through behavioural underwriting and peer pressure. Behavioural underwriting gives information to the lender, who utilises it in conjunction with standard credit-vetting data to reduce the risk of adverse selection. Peer pressure influences the borrower positively and reduces the risk, post disbursement, of moral hazard.

Behavioural underwriting and peer pressure increase the sustainability of the lending activity by reducing the cost of credit and increasing repayment levels. The decreased cost benefits borrowers through a lower repayment burden, and higher repayment levels benefit the lender through less capital loss.

The degree of separation between lenders and borrowers affects P2P transactions significantly. The further removed lenders and borrowers are, the higher the interest charges and the lower the repayment rates. This is evident in the lack of information gathered by lenders on borrowers, which negatively influences the value added by behavioural underwriting and peer pressure.

Unsecured lending is sustainable when there are low costs and high repayments. This is achieved through behavioural underwriting and peer pressure – disintermediation – and the degree of separation between lenders and borrowers, which has a direct bearing on sustainability.

Formalised P2P lending could play an integral role in unsecured lending in South Africa. As we have seen, individuals already use a variety of formal and informal credit products, which include P2P loans from family, friends and community organisations.

A formal P2P credit product could:

1. decrease the cost of credit;
2. reduce opportunity costs through use of credit;
3. increase peer pressure within formal credit;
4. reduce defaults through granular behavioural inputs;
5. increase repayment rates;
6. strengthen the legal recourse for P2P loans; and
7. develop a formal repayment history to increase access to further credit.

Appendix A: Survey Questions

Q1. Do you save money every month? (Select only one option)

- Yes
- No
- Other (please specify)

Q2. On average, how much money do you save each month? (Select only one option)

- I don't save
- Less than R500
- Between R500 and R2 000
- Between R2 000 and R5 000
- More than R5 000
- Other (please specify)

Q3. Where do you save money? (You may select more than one option)

- I don't save
- In a bank account
- I keep it in cash
- In another financial institution
- Other (please specify)

Q4. On average, how much do you earn on your savings annually? (Select only one option)

- I don't save
- Less than 10%
- Between 10% and 15%
- More than 15%
- I don't know

- Other (please specify)

Q5. Do you bank online? (Select only one option)

- Yes
- No
- Other (please specify)

Q6. Have you made any online purchases in the past 12 months? (Select only one option)

- Yes
- No
- Other (please specify)

Q7. Have you given a loan to a family member or friend? (Select only one option)

- Yes
- No
- Other (please specify)

Q8. Has a family member or friend ever defaulted or not repaid their loan to you? (Select only one option)

- Yes
- No
- Other

Q9. Would you consider giving a loan to a stranger if the risk of lending to that person were properly assessed and understood? (Select only one option)

- Yes
- No
- Other (please specify)

Q10. If you were to give a loan to a stranger, what type of loan would you prefer to fund? (You may select more than one option)

- A loan to fund education
- A loan to repay their credit card or overdraft debt
- A loan for household renovations
- A loan to start a business
- It doesn't matter to me, as long as I make money
- Other (please specify)

Q11. Would earning more than 20% in interest encourage you to lend money an individual? (Select only one option)

- Yes
- No
- Other (please specify)

Q12. Would you be more comfortable if you shared the risk of lending to an individual? For instance, if a person was looking for a R1000 loan and you and nine other people contributed R100 each towards the loan. (Select only one option)

- Yes
- No
- Other (please specify)

Q13. Would you lend money to a person who lived outside the province in which you live? (Select only one option)

- Yes
- No
- Other (please specify)

Q14. Would you lend money to a person of a different race or gender?

(Select only one option)

- Yes
- No
- Other (please specify)

Q15. What interest rate would you charge on a loan if you had to lend money?

(Select only one option)

- A return of 10% to 20%
- The absolute maximum I could get
- No interest needed. Just repay me the capital
- Other (please specify)

Q16. What types of loans do you have? (You may select more than one option)

- Home loan
- Vehicle and asset finance
- Personal loan
- Credit card debt
- Overdraft
- Other (please specify)

Q17. What do you use your loan/s for? (Select only one option)

- To manage day-to-day living expenses (food, clothes, transport)
- Only to purchase assets (car, home)
- A combination of both of the above
- Other (please specify)

Q18. Where did you get your loan/s from? (You may select more than one option)

- A registered credit provider (formal institution)
- Family and friends
- An informal moneylender
- Other (please specify)

Q19. What were the reasons you chose to take a loan from your credit provider/s?
(You may select more than one option)

- They provide cheap loans
- They were the fastest
- Their reputation is good
- It is convenient to get money there
- I've taken a loan out with them in the past
- They approved my application
- Other (please specify)

Q20. Would you or have you gone online to take out a loan? (Select only one option)

- Yes
- No
- Other (please specify)

Q21. Would you consider taking out a loan from an individual or person instead of a bank or credit provider? (Select only one option)

- Yes
- No
- Other (please specify)

Q22. What is your biggest concern when taking out a loan? (You may select more than one option)

- Cost
- If I qualify for the loan
- Speed of approval
- Convenience
- Other (please specify)

Q23. What is the interest rate on your most expensive loan? (Select only one option)

- Less than 10%
- Between 10% and 15%
- Between 15% and 20%
- More than 20%
- I don't know
- Other (please specify)

Q24. Would you take out a cheaper loan (at a lower interest rate) to pay off a more expensive loan? (Select only one option)

- Yes
- No
- Other (please specify)

Q25. Would you take a loan from a family member or friend if it had a lower interest rate? (Select only one option)

- Yes
- No
- Other (please specify)

Q26. Would you feel more pressure to repay a loan from a family member or friend than from a bank? (Select only one option)

- Yes
- No
- Other (please specify)

Q27. Would you feel comfortable to use an online platform to ask for a loan? (Select only one option)

- Yes – I don't mind
- No – I need privacy
- Other (please specify)

Q28. Do you feel you are coping with your current levels of debt and repayments? (Select only one option)

- Yes
- No
- Other (please specify)

Q29. Do you think banks and other credit providers charge too much on their loans?

(Select only one option)

- Yes
- No
- Other (please specify)

Q30. Are you comfortable with using the internet to apply for loans? (Select only one option)

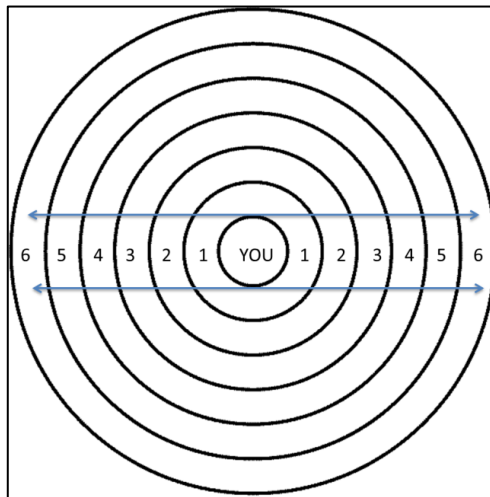
- Yes
- No

- Other (please specify)

End of survey.

Appendix B: Focus group

The aim of this focus group is to get your thoughts, feelings and preferences about specific peer-to-peer lending transactions. A lender in a peer-to-peer transaction lends money to other individuals.



Talking point 1

- Would you lend to money to your family and friends in the circle labelled 1?
- How much interest would you charge?

Talking point 2

- Would you lend to money to friends of friends in the circle labelled 2?
- How much interest would you charge?

Talking point 3

- Would you lend to money to acquaintances in the circle labelled 3?
- How much interest would you charge?

Talking point 4

- Would you lend to money to people in the circle labelled 4?
- How much interest would you charge?

Talking point 5

- Would you lend to money to people in the circle labelled 5?
- How much interest would you charge?

Talking point 6

- Would you lend to money to people in the circle labelled 6?
- How much interest would you charge?

Talking point 7

Would you lend to money the following people?

- a) A person of a different race?
- b) A person of a different gender?
- c) A person who lived in a different province?

Talking point 8

All things being equal, what interest rates would you charge the following people?

- a) A person of a different race?
- b) A person of a different gender?
- c) A person who lived in a different province?

A borrower in a peer-to-peer transaction borrows money from other individuals.

Talking point 9

- If you borrowed money, for whatever reason, would you need total secrecy of that credit agreement between you and the lender?
- Would you feel comfortable taking a loan out from 10 people?

Talking point 10

Scale: 1 being the most pressure and 10 being the least amount of pressure:

- If you borrowed money, for whatever reason, from a family member or friend, how much pressure would you feel to repay the loan?
- If you borrowed money, for whatever reason, from a friend of a friend, how much pressure would you feel to repay the loan?
- If you borrowed money, for whatever reason, from people you did not know, would you feel more pressure to repay the loan than if you took a loan from a registered credit provider?

Focus group answer sheet

Demographic information

	Answer
Age	
Race	
Gender	
Province	

Lending

	Yes	No
Talking point 1		
Interest charged		%

	Yes	No
Talking point 2		
Interest charged		%

Talking point 8	Interest charged %	
	Yes	No
Talking point 3		
Interest charged		%

	Yes	No
Talking point 4		
Interest charged		%

	Yes	No
Talking point 5		
Interest charged		%

	Yes	No
Talking point 6		
Interest charged		%

Talking point 7	Yes	No
Race		
Gender		
Province		
Country		

Race	
Gender	
Province	
Country	

Borrowing

	Yes	No
Talking point 9		
9.1		
9.2		

	Scale from 1 to 10
Talking point 10	
10.1	
10.2	
10.3	

Focus group answer sheet example: Subject 37

SUBJECT 37

Focus group answer sheet

Demographic information

	Answer
Age	29
Race	BLACK
Gender	MALE
Province	GP

Lending

Question 1	Yes	No
Interest charge		X 0 %

Question 2	Yes	No
Interest charge	X	5 %

Question 3	Yes	No
Interest charge	X	10 %

Question 4	Yes	No
Interest charge	X	15 %

Question 5	Yes	No
Interest charge	X	20 %

Question 6	Yes	No
Interest charge	X	20 %

Question 7	Yes	No
Race	X	
Gender	X	
Province		X
Country		X

Question 8	Interest Rate Charged %
Race	10 %
Gender	10 %
Province	15 %
Country	20 %

Borrowing

Question 9	Yes	No
9.1	X	
9.2		X

Question 10	Scale from 1 to 10
10.1	3 %
10.2	5 %
10.3	8 %

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